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ORGANIZATIONAL ASSESSMENT INDICES OF EFFECTIVENESS. (U)
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This final report was submitted by Occupation and Manpower Research Division, under project 2313, with HQ Air Force Human Resources Laboratory (AFSC), Brooks Air Force Base, Texas 78235.

This report has been reviewed by the Information Office (OI) and is releasable to the National Technical Information Service (NTIS). At NTIS, it will be available to the general public, including foreign nations.

This technical report has been reviewed and is approved for publication.

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Item 20 Continued:

prohibit administration of the entire OAP and the criterion inventories have been excluded to shorten OAP length.

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PREFACE

This research was completed under Work Unit 2313T103, Supervisory Style Effects on Productivity and Retention; in response to Request for Personnel Research 77-10, Development and Analysis of Organizational Assessment Package (OAP).

The authors are indebted to the Leadership and Management Development Center (LMDC) personnel whose assistance in data gathering were invaluable to this research effort. In particular, the constructive comments of Major David Wilkerson (LMDC/EDC) and Lt Col Fred Petty (LMDC/EDC) were especially beneficial. Also, this program could not have been accomplished without the assistance provided by Col Peter A. Land (LMDC/DMC), Col Henry M. Kelly (LMDC/EDC), Major L. B. Henry, Jr. (LMDC/DMC), CMSgt Richard G. Buxton (LMDC/EDC), and SMSgt Judith A. Vermilya (LMDC/DMC). The computer support provided by Computational Sciences Division, Air Force Human Resources Laboratory (AFHRL) was without a doubt outstanding. These personnel worked long, hard hours to meet stringent deadlines. In particular, the efforts of Mrs. Doris Black (AFHRL/SMSM), SrA Debbie McQuiston (AFHRL/SMQ), and Amn Joe Belef (AFHRL/SMAW) were especially noteworthy. In addition, the technical assistance provided by A1C Vicki B. Halverson (AFHRL/ORE) was extremely valuable in development of analysis work requests and data tabulation.

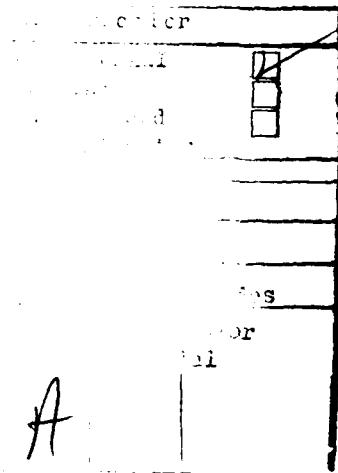


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ORGANIZATIONAL ASSESSMENT INDICES OF EFFECTIVENESS

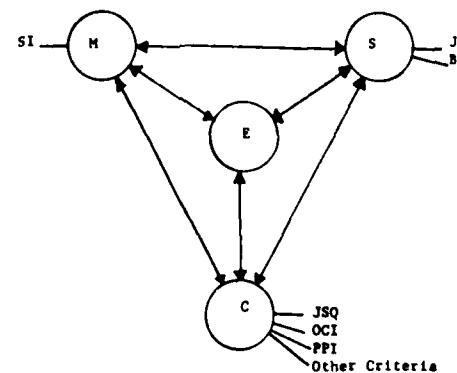
I. INTRODUCTION

Research personnel and practitioners of Organizational Development (OD) programs have had an interest in specifying in some precise way what changes have occurred within organizations when a variety of intervention strategies have been employed. To accomplish this intervention, strategies need to be specified precisely, as well as the resulting effects. The effects are usually thought of as criteria of organizational effectiveness. Frequently used criteria in organizational change programs include job satisfaction, organizational climate, performance ratings, product production rates, and perceived productivity. The research discussed in this report focused on one aspect of the subject by viewing organizational change within a contingency model of effectiveness. Specifically, this research investigated how to develop quantitative indices which reflect various aspects of an organization which are subject to change when the organizational system is modified.

II. METHOD

Model and Survey Instrument

The three Component Organizational Effectiveness Model (Figure 1) previously reported by Hendrix (1976) considered Organizational Effectiveness (E) to be a function of the criterion selected (c), the managerial style employed (m), and the situational environment (s) which includes the manager's subordinates, peers, and other personnel in the environment; that is, $E = f(c, m, s)$. In Hendrix (1976), the model was initially entitled the Three Component Leadership Effectiveness Model and has since been expanded to focus on the entire organization. Also the concept of leader (ℓ) has been replaced in the model by the manager (m).



Legend:

- M = Management Style
- SI = Supervisory Inventory
- S = Situational Environment
- JI = Job Inventory
- BI = Background Information
- E = Effectiveness
- C = Criterion
- JSQ = Job Satisfaction Questionnaire
- OCI = Organizational Climate Inventory
- PPI = Perceived Productivity Inventory
- Other Criteria

Figure 1. Three component organizational effectiveness model.

The Organizational Assessment Package (OAP) was designed to measure the basic components of the Three Component Organizational Effectiveness Model. As can be noted in Figure 1, the Supervisor Inventory (SI) was designed to measure managerial style (m), while the situational environment (s) was to be measured by two sections of the OAP, the Background Information (BI) section, and the Job Inventory (JI). The Job Inventory included items to measure job enrichment components as defined by Hackman, Oldham, Janson, and Purdy (1975). The criteria selected included satisfaction, organizational climate, and perceived productivity. These were to be measured by the sections entitled Job Satisfaction Questionnaire (JSQ), Organizational Climate Inventory (OCI), and Perceived Productivity Inventory (PPI). The version of the Organizational Assessment Package (OAP) used for data collection for this research effort is provided in Appendix A and consists of 16 Background Information items and 149 attitudinal items. The attitudinal items are 7-point (some contained a 0 point for not-applicable responses) Likert scales.

Sample

Data were collected by Air Force consultants from the Air Force Leadership and Management Development Center (LMDC) who administered the Organizational Assessment Package (Hendrix & Halverson, 1979a, 1979b) at selected Air Force installations to all available personnel. A sample of 4,786 subjects (military and civilian) was collected at five Air Force bases representing six major commands. The sample's composition was 2% high school non-graduates, 39% high school graduates or equivalent (e.g., GED certified), 37% some college work, 9% bachelor's degree, 6% some graduate work, 6% master's degree, 1% doctoral degree; 78% white, 10% black, 5% hispanic, 7% listed as other than white, black, or hispanic; 86% males, 14% females; 17% officers, 66% airmen, and 17% civilians.

Procedure

The job enrichment core dimensions as defined by Hackman et al. (1975) were computed. These are listed in Table 1 with the formula used to compute each, and they included the dimensions of skill variety, task identity, task significance, autonomy, and feedback from the job. In addition, the Job Motivation Index (JMI) was computed. The JMI is the OAP's equivalent to the Job Diagnostic Survey's (JDS) Motivation Potential Score (MPS), which was developed by Hackman et al. (1975) to measure their job enrichment core dimensions. The job enrichment core dimensions were also used to compute two additional formulas for comparison with the JMI to see if the alternative formulas were more predictive of the OAP's criteria. In Table 1 they are identified as variables 808 (JI total) and 809 (JMI-Additive). One formula (808) simply sums the five core dimensions, while the other formula sums variables 803 (autonomy) and 804 (job feedback) instead of multiplying them as was performed in computing the JMI. These job enrichment dimensions and their associated generated variables (i.e., variables 807 to 809) were then correlated with four criteria: *General Organizational Climate*, *Organizational Communications Climate*, *Job Related Satisfaction*, and *Perceived Productivity*. The four criteria were developed in a previous study (Hendrix & Halverson, 1979a) where they were extracted during factor analysis of OAP's attitudinal items (i.e., items 17 to 165). For each of these four factors, factor scores for each subject were computed to produce the four criteria indices of organizational effectiveness. In addition, factor scores were generated for subjects on 12 other OAP factors isolated by Hendrix and Halverson (1979a). (See Appendix B for factor score coefficients.) Table 2 lists the 16 factors which had scores computed to provide a single index for each factor for each subject. The resultant factor score variable is identified in Table 2 in the column labeled "Dependent Variable" (i.e., variables 830 to 851). Variable numbers can be used to identify OAP items by referring to Appendix A. The numbers provided in parentheses in Appendix A are the variable numbers associated with the respective OAP items. For example, the factor score criterion of *General Organizational Climate* is listed as variable 830.

Table 1. Job Enrichment Indices

Generated Variable Number ^a	Index Title	Computational Formula
800	Skill Variety	$(201 + 212)/2$
801	Task Identity	$(202 + 211)/2$
802	Task Significance	$(203 + 210)/2$
803	Autonomy	$(204 + 213)/2$
804	Job Feedback	$(205 + 209)/2$
807 ^b	Job Motivation Index	$\{(800 + 801 + 802)/3\} \times 803 \times 804$
808	JI Total	$800 + 801 + 802 + 803 + 804$
809	JMI Additive	$\{(800 + 801 + 802)/3\} + 803 + 804$

^a Variables were generated by computing the associated formula. For example, variable 800 was created for skill variety by using the computational formula $(201 + 212)/2$ where 201 and 212 are OAP variable numbers.

^b Hendrix and Halverson (1979) in describing the JMI computational formula averaged four variables instead of the three listed here i.e., $800 + 801 + 802$. The additional variable used was work irritants which has not been used here since it correlated less well with the criteria than did the 800, 801, and 802 variables.

Table 2. Estimated Factor Score Regression Variables

Analysis Number	Generated Variable Number	Factor	R ²	Estimated Factor Score Variables	
				Dependent Variable	Independent Variable
1	860	General Organizational Climate	.827	830	111, 121, 110, 122, 109, 112, 116, 115, 117, 114.
2	861	Organizational Communications Climate	.838	831	104, 103, 105, 107, 113.
3	862	Job Related Satisfaction	.849	832	717, 723, 716, 718, 719, 710, 715, 705, 713, 714.
4	863	Perceived Productivity	.989	833	260, 265, 261, 259, 264.
5	864	Job Enrichment	.743	840	215, 244, 210, 203, 201, 212, 230, 209, 217, 202.
6	865	Planning Time Management	.883	841	224, 223, 225, 222, 219, 229, 232, 231, 235.
7	866	Task Autonomy	.778	842	213, 204, 214, 248.
8	867	Advancement Recognition	.764	843	239, 240, 234, 241.
9	868	Task Accomplishment	.766	844	218, 206, 228, 212, 201, 202, 230.
10	869	Work Repetition	.835	845	226, 227.
11	870	Meaningful/Response	.920	846	252, 253, 251, 250, 254.
12	871	Management Supervision	.732	847	404, 412, 413, 416, 411, 414, 405, 410.
13	872	Supervisor Assistance/Feedback	.673	848	435, 437, 442, 433.
14	873	Autonomous Control	.847	849	421, 419, 415, 417.
15	874	Training Satisfaction	.858	850	711, 712.
16	875	Base Facilities Satisfaction	.944	851	721, 720, 722.

The next step involved estimating what will be referred to as the true factor score, which was computed on all items associated with a given factor, by using a sub-set of the items. For example, Appendix B provides the factor score coefficients for the 16 factors used in this research and includes the four criteria of *General Organizational Climate*, *Organizational Communications Climate*, *Job Related Satisfaction*, and *Perceived Productivity*. The purpose of these analyses was to establish whether a small sub-set of items would adequately tap the common variance predicted by the true factor score. If the R^2 values were significantly high, then the OAP items not used in the equations could be deleted, thereby reducing the length of the OAP. In Appendix B, for the *General Organizational Climate* factor, there are a total of 23 items used to compute a given subject's factor score. Of these 23 items, the 10 items loading the highest on the factor were regressed against the true factor score (variable 830) to produce the *General Organizational Climate Estimated Factor Score*. These 10 items are listed in Table 2 under the column labeled "Independent Variable." As previously noted, each item is identified by its variable number which can be used to identify the OAP item in Appendix A. For the *Organizational Climate Inventory*, the response options available did not include a 0 = not applicable response option. The *Perceived Productivity Inventory*, *Supervisor Inventory*, and *Job Satisfaction Questionnaire*, however, did have the 0 = not applicable response option. A provision had to be made for inclusion of this response option in the regression equations associated with variables from these inventories. This was accomplished by creating a new variable to represent the 0 = not applicable response for each item having that response option. For example, in Table 2, analysis 4 has five independent variables listed; however, the regression equation computed consisted of 10 independent variables; five of which were those that could be responded to on a 7-point scale, plus the five variables created for the 0 = not applicable response options. In Table 2, the items/variables provided under the column labeled "Independent Variables" for *General Organizational Climate Estimated Factor Score* are listed in descending order of the magnitude of their factor loadings. This order can also be noted in Table 3 which contains the highest loading 10 items for each factor isolated during a series of factor analyses performed by Hendrix and Halverson (1979a). These factor estimation scores were computed for all 16 factors listed in Table 2.

The next group of analyses performed involved regressing a series of prediction variables from the *Job Inventory* and *Supervisor Inventory* against the four criteria to develop equations which could be used to predict the criteria should the Job and Supervisor Inventories be used separately. Table 4 lists the series of regression analyses performed in developing these equations. The first set of analyses in this group involved regressing situational variables from the OAP's Job Inventory against the four criteria (i.e., variables 830 to 833). The second set of analyses regressed Managerial variables from the *Supervisor Inventory* against the criteria. The third set of analyses regressed the combined set of variables from the *Job Inventory* and *Supervisor Inventory* to obtain an aggregate index for predicting the four criteria. The purpose of these analyses was to find the smallest sub-set of predictor variables which would account for the majority of predictive variance. To accomplish this a stepwise regression procedure (i.e., stepup procedure) was desired. The computer programs available, however, did not have a stepwise program which added each variable in terms of maximally increasing R^2 to some specified stop criterion.

To accomplish the desired end, two available programs, REGR and REGREX, were run. These two programs were developed by the Computational Sciences Division, Air Force Human Resources Laboratory. The first program (REGR) added three variables at a time, selecting the three variables which had the highest combined R^2 of any three-variable set. Iteratively, the next three most predictive variables were added until a stop criterion was met. In this case, the stop criterion was .0001 for R^2 increase. That is, an R^2 increase of .0001 or larger had to occur with the candidate variable for it to be entered in the equation. The next step involved putting those

Table 3. OAP Sections Detailed Factor Analyses

Var.	Loading	Alpha	Var.	Loading	Alpha	Var.	Loading	Alpha	Var.	Loading	Alpha
Situational Environment											
Job Enrichment			Task Autonomy			Planning and Time Management			Supervisor Influence^a		
215	.73		213	.79		224	.80		247	.77	
244	.70	.86d	204	.78	.81d	223	.68	.71d	246	.74	.79
210	.63	.79d	214	.67	.83d	225	.61	.71d	245	.74	.84
203	.61	.81d	248	.49	.84d	222	.59	.70d	248	.60	.86
201	.58	.82d	205	.41	.84	219	.45	.70d	216	.44	.84
212	.54	.84d	209	.36	.86	229	.39	.71d	241	.38	.85
230	.52	.85d	211	.35	.86	232	.36	.73d	217	.31	.85
209	.51	.86d	246	.28		231	.35	.76d	244	.31	.86
217	.49	.87d	231	.28		235	.35	.78d	220	.27	
202	.49	.87d	202	.25		241	.25		236	.26	
Advancement/ Recognition			Equipment/Work Space/Goal Clarity^b			Work Repetition			Task Accomplishment^c		
239	.80		208	.74		226	.81		218	.64	
240	.64	.69d	207	.65	.53d	227	.80	.71d	206	.52	.32d
234	.61	.69d	220	.34	.56	228	.47	.62	228	.51	.40d
241	.48	.75d	211	.33	.62	225	.23		212	.42	.46d
233	.27		209	.30	.70	244	.22		201	.41	.58d
231	.21		217	.30	.75	215	.17		202	.32	.62d
235	.21		221	.28		223	.17		230	.31	.68d
244	.20		233	.26		206	.17		220	.27	
219	.19		202	.22		202	.16		221	.27	
221	.19		234	.21		203	.15		217	.22	
Supervisory Inventory											
Management/ Supervision			Supervisor Assistance/Feedback			Autonomous Autonomous Control^c					
404	.77		435	.76		421	.69				
412	.76	.86d	437	.74	.85d	419	.65	.53d			
413	.73	.89d	442	.73	.87d	415	.56	.51d			
416	.72	.90d	433	.71	.91d	417	.56	.58d			
411	.72	.91d	431	.71	.92	434	.35	.55			
414	.71	.93d	436	.69	.92	425	.31	.60			
405	.70	.93d	429	.68	.93	422	.29	.66			
410	.68	.94d	438	.67	.94	443	.29				
440	.68	.95	428	.66	.95	403	.28				
406	.67	.95	427	.62	.95	426	.26				
Organization Climate Inventory											
General Organizational Climate			Organizational Communications Climate			Perceived Productivity					
High Productivity			Performance Distribution								
111	.76		104	.86		260	.83		262	.78	
121	.75	.82d	103	.84	.88d	265	.80	.74d	263	.77	.34
110	.73	.85d	105	.71	.86d	261	.78	.80d	259	.16	
122	.71	.87d	107	.67	.87d	259	.72	.81d	264	.05	
109	.69	.90d	113	.61	.89d	264	.71	.82d	260	.05	
112	.69	.90d	124	.59	.89	263	.24		261	.01	
116	.66	.91d	106	.52	.90	262	.23		265	.01	
115	.66	.92d	102	.51	.91						
117	.66	.92d	120	.48	.91						
114	.61	.93d	109	.44	.92						
			114	.44	.93						

Table 3 (*Continued*)

Var.	Loading	Alpha	Var.	Loading	Alpha	Var.	Loading	Alpha	Var.	Loading	Alpha
Job Satisfaction											
Job Related Satisfaction			Local Area/Social Satisfaction^b			Training			Base Facilities		
717	.75		707	.81		711	.80		721	.86	
723	.72	.62 ^d	708	.69	.63 ^d	712	.79	.71 ^d	720	.78	.75 ^d
716	.69	.78 ^d	706	.45	.64	704	.45	.67	722	.71	.74 ^d
718	.68	.79 ^d	705	.39	.72	713	.43	.73	707	.20	
719	.63	.82 ^d	709	.36	.75	705	.39	.77	715	.18	
710	.56	.84 ^d	714	.35	.77	709	.38	.80	704	.17	
715	.52	.85 ^d	704	.33	.80	706	.35	.82	714	.16	
705	.50	.86 ^d	713	.28		716	.31	.84	718	.14	
713	.50	.87 ^d	716	.28		719	.31	.86	717	.14	
714	.42	.88 ^d	710	.27		723	.29		711	.12	
Need for Enrichment											
Meaningful/ Responsible Work			Desired Repetitive/ Easy Tasks								
252	.87		255	.86							
253	.84	.85 ^d	258	.83	.64						
251	.84	.88 ^d	254	.22							
250	.83	.91 ^d	251	.19							
254	.82	.92 ^d	250	.18							
249	.69	.92	256	.14							
256	.68	.92	252	.13							
257	.66	.91	253	.09							
255	.10		249	.04							
258	.05		257	.04							

^aThis factor recommended for deletion since in the overall OAP factor analysis variables listed here load on factor in the Supervisor Inventory.

^bRecommend deletion since internal consistency index is low for variables recommended for inclusion. Additional variables not recommended for inclusion since they do not logically relate to the factor.

^cThis factor is weak in terms of internally consistency. Should this factor be included, additional items to strengthen it is recommended.

^dRecommended for inclusion.

Table 4. Job Inventory and Supervisor Inventory Regression Equation Variables

Analysis Number	Regression Analysis	R ²	Dependent Variable	Independent Variable
17	Situational variables regressed with General Organizational Climate	.517	830	201 215, 217 234, 238, 244, 249 258.
18	Situational variables regressed with Organizational Communications Climate	.235	831	201 215, 217, 234, 238, 244, 249, 258.
19	Situational variables regressed with Job Satisfaction	.522	832	201, 215, 217, 234, 238, 244, 249, 258.
20	Situational variables regressed with Perceived Productivity	.425	833	201 215, 217 234, 238 244, 249 258.
21	Managerial variables regressed with General Organizational Climate	.416	830	403 443.
22	Managerial variables regressed with Organizational Communications Climate	.186	831	403 443.
23	Managerial variables regressed with Job Satisfaction	.265	832	403 443.
24	Managerial variables regressed with Perceived Productivity	.300	833	403 443.
25	OAP variables regressed with General Organizational Climate	.565	830	201 215, 217, 234, 238, 244, 249 258, 403 443.
26	OAP variables regressed with Organizational Communications Climate	.304	831	201 215, 217 234, 238 244, 249 258, 403 443.
27	OAP variables regressed with Job Satisfaction	.547	832	201 215, 217 234, 238 244, 249 258, 403 443.
28	OAP variables regressed with Perceived Productivity	.469	833	201 215, 217 234, 238 244, 249 258, 403 443.

variables identified by the REGR program as the most predictive set into the REGREX program. This program did not provide a stop criterion as did REGR, but did permit adding each variable iteratively starting with the variable yielding the highest R^2 , then adding a second variable which, when combined with the first, produced the highest combined R^2 , and then in a like fashion, the remaining variables were added. Therefore, by using these two programs, the stepwise regression equations were produced.

III. RESULTS

Table 5 lists the job enrichment variables described earlier as well as the four criteria of *General Organizational Climate*, *Organizational Communications Climate*, *Job Related Satisfaction*, and *Perceived Productivity*. For each variable, the minimum or lowest rating and the maximum or highest rating given by an individual is also listed along with the mean and standard deviation for each variable. Table 6 is an intercorrelation matrix of the job enrichment formulas (V807 to V809) and the four criterion variables. Also included are the regression correlation coefficients from analyses 17 to 20, where variables from the Job Inventory (i.e., situational variables) were regressed against the four criteria. In reviewing the correlations of the three job enrichment formulas (i.e., JMI, V807; JI Total, V808; and JMI Additive, V809) with the four criteria (i.e., V830 to V833), a pattern appears. Although the differences between the correlations are small, in all cases the JI Total and JMI Additive formulas are more predictive of the four criteria than was the JMI multiplicative formula. For three of the criteria (i.e., V830 to V832), the JMI Additive formula was the best predictor, while for Perceived Productivity (V833), the JI Total predicted best. Instead of using these rather simple formulas, better prediction of the criteria would be expected if a series of job enrichment items were regressed against them. Analyses 17 to 20, which will be discussed in more detail later, were such analyses which incorporated job relevant variables for prediction of the four criteria. The factors which these variables measured are listed in Table 3 under the headings of *Situational Environment* and *Need for Enrichment*. All variables were included in the stepwise regression pool prior to analysis, except for items loading on the *Supervisor Influence* factor. As can be noted in Table 6, the regression equations multiple correlations are consistently higher than were the correlations for the JMI, JI Total, and JMI Additive formulas. Therefore, if the definition of the world of work is broadened beyond that usually applied to job enrichment so that it includes all factors identified by the OAP's Job Inventory, then a better predictive system results for predicting satisfaction, climate, and productivity (V830 to V833) as defined within this report. Since this concept is somewhat broader than defined previously in this report, the term *Situational Environment Index* (SEI) will be used to identify the predicted value for an individual or work group when computed by the regression equations provided in Appendix D. The SEI can be considered simply an index for predicting the four OAP criteria (i.e., *General Organizational Climate*, *Organizational Communications Climate*, *Job Related Satisfaction*, and *Perceived Productivity*) from job related variables associated with the nine factors of Table 3 *Situational Environment* and *Need for Enrichment* sections (the *Supervisor Influence* factor variables were not included).

The second group of analyses involved developing an *estimated factor score* for the *true factor score* of the 16 factors listed in Table 2. The variance accounted for in the true factor score by using a sub-set of variables to produce the estimated factor score is identified by the R^2 column in Table 2. The predictive accuracy of the estimated factor score equations was rather high, ranging from a low of .673 (Supervisor Assistance/Feedback factor) to a high of .989 (Perceived Productivity factor). Three factors had R^2 values in the .90's; seven factors were in the .80's; five factors were in the .70's; and one factor had an R^2 in the .60's. The equations for each estimated factor score are provided in Appendix C, which is an abbreviated version of the computer regression analysis output.

Table 5. Job Enrichment Dimensions, Job Related Formulas, and Four Criteria of Effectiveness

VAR	T/S DESCRIPTION	MAXIMUM	MINIMUM	MEAN	S.D.
1. F0000	V800_SKILL_VARIETY	2.0000	1.0000	1.5244	1.5957
2. F0001	V801_TASK_IDENTITY	2.0000	1.0000	1.2052	1.4362
3. F0002	V802_TASK_SIGNIFICANCE	2.0000	1.0000	1.0000	1.0000
4. F0003	V803_AUTONOMY	2.0000	1.0000	1.0000	1.0000
5. F0004	V804_JOB_FEEDBACK	2.0000	1.0000	1.6549	1.4257
6. F0007	V807_JOB_MOTIVATION_INDEX_JM12	7.0000	1.0000	5.1871	1.6746
7. F0008	V808_JI_TOTAL	343.0000	1.0000	122.1291	1.3522
8. F0009	V809_JMI_ADDITIVE	35.0000	5.0000	29.4892	5.3623
9. F0010	V810_GENERAL_ORGANIZATIONAL_CLIMATE	21.0000	3.0000	14.4330	3.4179
10. F0011	V811_ORGANIZATIONAL_COMMUNICATIONS_CLIMATE	2.0041	-3.7298	.0383	1.0039
11. F0012	V812_JOB RELATED SATISFACTION	2.7101	-31.8433	.0101	.9874
12. F0013	V813_PERCEIVED_PRODUCTIVITY	2.8105	-3.3032	.0944	1.0096
		1.4518	-4.5765	.0017	1.0050

**Table 6. Correlations of Job Related Formulas
with Four Criteria of Effectiveness**

Criteria	JMI (V807)	JI Total (V808)	JMI Additive (V809)	SEI Regression Equation (Analyses 17-20)
General Organizational Climate (V830)	.436	.462	.467	.719
Organizational Communications Climate (V831)	.215	.219	.226	.484
Job Related Satisfaction (V832)	.505	.520	.532	.723
Perceived Productivity (V833)	.394	.459	.437	.652

The estimated factor score can be computed operationally, by adding the regression constant to the sum of each variable times its associated regression weight, that is $y = \text{regression constant} + \text{regression weight}_1 (\text{variable}_1) + \text{regression weight}_2 (\text{variable}_2) + \dots + \text{regression weight}_n (\text{variable}_n)$. The variable numbers associated with OAP items are those preceded by the letters "FO" (e.g., variable 109 is listed as F0109). Both raw score and standardized weights are provided for computing equations using respondents' actual score responses or using scores that had been standardized. As noted earlier, those items having a 0 = *not applicable* response option had the not-applicable responses coded as a separate variable from the respective item. For example, in Appendix A for item number 75, it can be noted that if the item is applicable, it can be responded to on a 1 to 7 scale, and a 1 to 7 response would be coded as variable 259 for analysis purposes. If an individual enters a 0 to indicate the item is not applicable, then this response would be coded as variable 724. This permits developing regression equations which allow for weighting both the 1 to 7 response options and the 0 = *not applicable* response options. This can be seen for analysis 4 (Perceived Productivity Estimated Factor Score) in Appendix C where variables 259, 260, 261, 264, and 265 are the 1 to 7 response variables and variables 724, 725, 726, 729, and 730 are the respective 0 = *not applicable* responses associated with the above 1 to 7 response variables.

The next group of analyses involved developing regression equations using predictor variables from the Job Inventory and Supervisor Inventory to predict the four criteria. In Table 4 under the R^2 column is listed the variance in the criterion accounted for by the predictor/independent variables when regressed against the respective criterion using the stepwise regression procedure described earlier. Those variables identified as situational variables were from the Job Inventory, those identified as managerial variables were from the Supervisor Inventory, and those identified as OAP variables included variables from both the Job and Supervisor Inventories. These regression equations provide a single index for predicting a given criterion. If the Job Inventory and Supervisor Inventory were administered without the other inventories, then the "OAP variables" prediction equations would serve to estimate the criteria scores. If either the Job Inventory or the Supervisor Inventory was used separately, then the "situational variable" equation or "managerial variable" equation could be used to predict the criteria. The "OAP variables" equations had the highest R^2 values since both situational and managerial variables were included (R^2 Range = .304 - .565). The "situational variables" equations were the next most predictive (R^2 Range = .235 - .522), with the "managerial variables" equations being the least predictive (R^2 Range = .186 - .416).

The equations for predicting the four criteria from the situational and managerial variables are provided in Appendix D. The regression equations provided in Appendix D follow the same format as those in Appendix C, and operationally, the estimated criterion scores are computed the same as previously described.

IV. DISCUSSION

Three groups of analyses have been presented. The first compared various formulas for determining job enrichment in terms of their predictive ability of four OAP criteria. The JMI formula was the least predictive, while the SEI was the most predictive. The SEI included more variables and its computation was more complex and did not readily permit handscoring as did the JMI, JI total, and JMI Additive formulas. Nonetheless, its increase in predictability over the other formulas was sufficiently large to recommend it for consideration for operational use as a predictive index of the four OAP criteria.

The second group of analyses involved estimating factor scores for OAP factors from a small sub-set of variables associated with each factor. These equations were highly predictive (R^2 Range = .673 - .989) of the true factor scores and provided a means of accurately predicting the true factor scores with fewer variables.

The third group of analyses involved predicting the four criterion factor scores with variables from the Job Inventory and Supervisor Inventory. By combining variables from the Job and Supervisor Inventories, the most predictive equations of the four criteria were obtained (R^2 Range = .304 - .565).

The equations provided here are recommended for use with the OAP. First, a single index for each factor can be obtained using the factor score coefficients provided in Appendix B. In addition, there are equations which provide a means for computing the JMI by the traditional Hackman et al. (1975) formula, plus other formulas, of which the SEI is recommended if predictive accuracy of the OAP criteria is desired. Also, equations to estimate factor scores permits an OAP user to reduce the length of the OAP. This can be accomplished by selecting only those inventories or factors of interest and then selecting those items from the factor score variable sub-sets used to estimate the true factor scores. The regression equations (Analysis 17 to 20) developed for predicting the OAP criteria from the Job and Supervisor Inventory variables permits estimating the criterion scores for work groups without administering the *Perceived Productivity Inventory*, *Job Satisfaction Questionnaire*, or the *Organizational Climate Inventory*. Therefore, this is another way of reducing the survey length if desired.

V. SUMMATION

The Organizational Assessment Package (OAP) was developed to measure the components of the Three Component Organizational Effectiveness Model. Each inventory or questionnaire within the OAP was designed to be used independently, or as a part of the total package. This modular concept when used with the regression equations presented in this report provides a flexible instrument package to be used in total or in part. If a shorter version of the OAP is needed, a variety of methods for reducing survey length are presented. If length is not an important consideration, then the full length OAP provides a means of tapping factors associated with the manager, the situational environment, and the various criteria of effectiveness.

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APPENDIX A: ORGANIZATIONAL ASSESSMENT PACKAGE (VERSION 3)

The Organizational Assessment Package (OAP) is a series of surveys for collecting information about you, your job, your work group, your supervisor, and your organization.

The terms **work group**, **organization**, and **supervisor** are used throughout the OAP and need some clarification. The term **work group** refers to a group of individuals working for the same supervisor, while the term **organization** refers to the overall organizational unit. For example, if your position is within a section of a squadron then the squadron would be your organization and your section would be your work group.

With the exception of the Background Information Section, two types of scales are used in the OAP. Most surveys will have a seven point (1 – 7) scale; however, three inventories will include a zero point (0 – 7) which should be marked if an item is non-applicable. Mark your answers on the separate answer sheet provided. Please use a number 2 pencil only. Make heavy black marks that fill the oval-shaped space. For example, using the scale below, if you **moderately agree** with item statement 1 then you would blacken oval number 6 on the answer sheet as shown in the example below.

Scale:

0 = Not applicable	4 = Neither agree nor disagree
1 = Strongly disagree	5 = Slightly agree
2 = Moderately disagree	6 = Moderately agree
3 = Slightly disagree	7 = Strongly agree

Item Statement

1. The information your work group receives from other work groups is helpful.

Answer Response:

() 001 (1) (2) (3) (4) (5) (7)

Should the above statement not be applicable for you then you would mark the unnumbered oval as shown below.

Answer Response:

002 (1) (2) (3) (4) (5) (6) (7)

It is important that you answer all items honestly. Only in this way can an accurate description of your organization be obtained.

Summary results only describing your organization will be provided to your organization. In turn, your organization will have the opportunity to present the results to you and discuss them. Your individual responses are confidential, and will not be provided to your organization or any other agency. Only those individuals performing this research will have access to your completed OAP.

DO NOT STAPLE OR OTHERWISE DAMAGE THE ANSWER SHEET.

PRIVACY ACT STATEMENT

1. **Authority:** 10 USC 8012, Secretary of the Air Force, Powers, Duties, Delegation by Compensation E.O. 9397, 22 Nov 43, Numbering System for Federal Accounts Relating to Individual Persons.
2. **PRINCIPAL PURPOSE(S):** This information will be used for Air Force research and development purposes and for organizational problem area identification.
3. **ROUTINE USES:** Information provided by respondents will be treated **confidentially** and will be used for official research purposes and organizational problem area identification. Information obtain will also be used to improve instruments and techniques for organizational assessment.
4. **WHETHER DISCLOSURE IS MANDATORY OR VOLUNTARY AND EFFECT ON INDIVIDUAL OF NOT PROVIDING INFORMATION:** Disclosure of this information is voluntary. The Air Force continues to improve only with your assistance to make additional refinements in management of its resources. Your cooperation in this effort is appreciated.

BACKGROUND INFORMATION**Instructions**

The first section of this survey concerns your background. Please use the separate answer sheet and darken the oval which corresponds to your response to each question.

1. You are an:
(901)* 1. Officer (904) 4. Civilian (Wage Employee)
(902) 2. Airmen (905) 5. Non-Appropriated Fund (NAF) Employee
(903) 3. Civilian (GS) (906) 6. Others
2. Your grade level is:
(907) 1. 1-3 (911) 5. 10-12
(908) 2. 4-5 (912) 6. 13-15
(909) 3. 6-7 (913) 7. 16 or Higher
(910) 4. 8-9
3. Total months in this organization is:
(914) 1. Less than 1 month.
(915) 2. More than 1 month, less than 6 months.
(916) 3. More than 6 months, less than 12 months.
(917) 4. More than 12 months, less than 18 months.
(918) 5. More than 18 months, less than 24 months.
(919) 6. More than 24 months, less than 36 months.
(920) 7. More than 36 months.

*Number in parenthesis identifies variable for reference only.

4. Total months experience in present job is:

- (921) 1. Less than 1 month.
- (922) 2. More than 1 month, less than 6 months.
- (923) 3. More than 6 months, less than 12 months.
- (924) 4. More than 12 months, less than 18 months.
- (925) 5. More than 18 months, less than 24 months.
- (926) 6. More than 24 months, less than 36 months.
- (927) 7. More than 36 months.

5. Your race is:

- (928) 1. American Indian or Alaskan Native
- (929) 2. Asian or Pacific Islander
- (930) 3. Black, not of Hispanic Origin
- (931) 4. Hispanic
- (932) 5. White, not of Hispanic Origin
- (933) 6. Other

6. Your sex is:

- (934) 1. Male
- (935) 2. Female

7. Your highest educational level obtained was:

- (936) 1. Non high school graduate
- (937) 2. High School graduate or GED
- (938) 3. Some college work
- (939) 4. Bachelor's degree
- (940) 5. Some graduate work
- (941) 6. Master's degree
- (942) 7. Doctoral degree

8. Highest level of professional military education (residence or correspondence):

(943) 0. None or not applicable	(946) 3. NCO Academy (Phase 4)
(944) 1. NCO Orientation Course or USAF Supervisor Course (NCO Phase 1 or 2)	(947) 4. Senior NGO Academy (Phase 5)
(945) 2. NCO Leadership School (NCO Phase 3)	(948) 5. Squadron Officer School
	(949) 6. Intermediate Service School (Officer)
	(950) 7. Senior Service School (Officer) (i.e., Air War College)

9. How many people do you directly supervise (i.e., those you write performance reports for)

- (951) 1. None
- (952) 2. 1 to 2
- (953) 3. 3 to 5
- (954) 4. 6 to 8
- (955) 5. 9 to 12
- (956) 6. 13 to 20
- (957) 7. 21 or more

10. Does your supervisor actually write your performance report?

- (958) 1. Yes
- (959) 2. No

11. Your work requires you to work primarily:

(960) 1. Alone
(961) 2. With one or two people
(962) 3. As a small group team member
(963) 4. As a large group team member (5 or more people)
(964) 5. Other

12. How stable are your work hours?

(965) 1. Highly Stable – Routine 8 hours a day
(966) 2. Very Stable – Nearly routine 8 hour day
(967) 3. Moderately Stable – Shift work which periodically changes
(968) 4. Slightly Unstable – Irregular working hours
(969) 5. Highly Unstable – Frequent TDYs, frequently on call

13. Your job requires how much communication between workers?

(970) 1. Very little (973) 4. Very frequent
(971) 2. Little (974) 5. Almost continuous
(972) 3. Moderate

14. To what extent in your work group are group meetings used to solve problems and establish goals and objectives?

(975) 1. None (977) 3. About half the time
(976) 2. Occasionally (978) 4. Almost totally

15. Your work schedule is basically:

(979) 1. Shift work, usually days.
(980) 2. Shift work, usually swing shift.
(981) 3. Shift work, usually nights.
(982) 4. Shift work, usually days and nights.
(983) 5. Daily work only.
(984) 6. Crew schedule.
(985) 7. Other.

16. Which of the following best describes your career intentions?

(986) 1. To continue in the Air Force.
(987) 2. Will most likely continue in the Air Force.
(988) 3. May continue in the Air Force.
(989) 4. Planning to retire in the next 12 months.
(990) 5. Other

JOB INVENTORY

Instructions

Below are items which relate to your job. Read each statement carefully and then decide to what extent the statement is true of your job. Indicate the extent that the statement is true for your job by choosing the statement below which best represents your job.

1 = Not at all	5 = To a fairly large extent
2 = To a very little extent	6 = To a great extent
3 = To a little extent	7 = To a very great extent
4 = To a moderate extent	

Select the corresponding number for each question and enter it on the separate answer sheet.

PART I: THE JOB ITSELF

- (201) 17. To what extent does your job require you to do many different things, using a variety of your talents and skills?
- (202) 18. To what extent does your job involve doing a **whole** task or unit of work?
- (203) 19. To what extent is your job significant, in that it affects others in some important way?
- (204) 20. To what extent does your job provide an great deal of freedom and independence in scheduling your work and selecting your own procedures to accomplish it?
- (205) 21. To what extent does just doing your job provide you with chances to find out how well you are doing?
- (206) 22. To what extent do **additional duties** interfere with the performance of your primary job?
- (207) 23. To what extent do you have adequate tools and equipment to accomplish your job?
- (208) 24. To what extent is the amount of work space provided adequate?
- (209) 25. To what extent does your job provide the chance to know for yourself when you do a good job; and to be responsible for your own work?
- (210) 26. To what extent does doing your job well affect a lot of people?
- (211) 27. To what extent does your job provide you with the chance to finish completely the piece of work you have begun?
- (212) 28. To what extent does your job require you to use a number of complex skills?
- (213) 29. To what extent does your job give you freedom to do your work as you see fit?
- (214) 30. To what extent are you allowed to make the major decisions required to perform your job well?
- (215) 31. To what extent are you proud of your job?
- (216) 32. To what extent do you feel accountable to your supervisor in accomplishing your job?
- (217) 33. To what extent do you know exactly what is expected of you in performing your job?
- (218) 34. To what extent are your job performance goals difficult to accomplish?
- (219) 35. To what extent are staff assistance visits helpful in achieving job performance?
- (220) 36. To what extent are your job performance goals clear and specific?
- (221) 37. To what extent are your job performance goals realistic?

1 = Not at all 5 = To a fairly large extent
2 = To a very little extent 6 = To a great extent
3 = To a little extent 7 = To a very great extent
4 = To a moderate extent

(222) 38. To what extent do you use Management Information Systems(e.g., Computer Printouts, reports, etc.) to make decisions in your job?

(223) 39. How much of your time is used for planning more than 6 months ahead?

(224) 40. How much of your time is used for weekly or monthly planning?

(225) 41. How much of your time is used for daily planning?

(226) 42. To what extent do you perform the same tasks repeatedly within a short period of time?

(227) 43. To what extent are you faced with the same type of problem on a weekly basis?

(228) 44. To what extent are tasks you perform easy to accomplish?

(229) 45. To what extent is planning modified to meet changing job related needs? Changing environment?

(230) 46. To what extent does your job keep you busy?

(231) 47. To what extent are the people affected by decisions asked for their ideas?

(232) 48. To what extent is the amount of information you get from other work groups adequate to meet your job needs?

(233) 49. To what extent do you know what the objectives of your organization are?

(234) 50. To what extent are you aware of promotion/advancement opportunities that affect you?

(235) 51. To what extent is your work group involved in establishing goals?

(236) 52. To what extent does your work group solve problems effectively?

(237) 53. To what extent does your work group perform effectively under pressure?

(238) 54. To what extent do coworkers in your work group maintain high standards of performance?

(239) 55. To what extent do you have the opportunity to progress up your career ladder?

(240) 56. To what extent are you being prepared to accept increased responsibility?

(241) 57. To what extent do people who perform well receive recognition?

(242) 58. To what extent do you feel adequately trained to perform your assigned tasks?

(243) 59. To what extent are you satisfied with your job?

(244) 60. To what extent does your work give you pride and feeling of self-worth?

(245) 61. To what extent does your supervisor provide the assistance you need to manage your work?

(246) 62. My supervisor asks for ideas before making decisions.

(247) 63. To what extent does your supervisor encourage the people in your work group to work as a team?

(248) 64. To what extent does your supervisor allow you to make decisions concerning your job?

Instructions

Below are statements which deal with job characteristics. Some of these may not be in your job now. However, read each statement below and choose the answer which best represents how much **you would like to have each characteristic in your job.**

In my job, I would like to have the **characteristics described:**

1 = A slight amount	5 = A large amount
2 = An average amount	6 = A very large amount
3 = A moderate amount	7 = An extremely large amount
4 = A fairly large amount	

(249) 65. Opportunities to have independence in my work.
(250) 66. A job that is meaningful.
(251) 67. The availability for personal growth in my job.
(252) 68. Opportunities in my work to use my skills.
(253) 69. Opportunities to perform a variety of tasks.
(254) 70. Opportunities in my work to learn new and exciting things.
(255) 71. A job in which tasks are repetitive.
(256) 72. Opportunities to keep busy in my work.
(257) 73. The opportunity to perform all tasks or jobs in my career field from time to time.
(258) 74. A job in which tasks are relatively easy to accomplish.

PERCEIVED PRODUCTIVITY

Instructions

The statements below deal with the output of your work group. For some jobs certain statements may not be applicable. Should this be the case for your work group, then you should select the **not applicable** statement coded "0" below. Indicate your agreement with the statement by selecting the answer which best represents your attitude concerning your work group.

N/A Response Variable	0 = Not applicable	4 = Neither agree nor disagree
	1 = Strongly disagree	5 = Slightly agree
	2 = Moderately disagree	6 = Moderately agree
	3 = Slightly disagree	7 = Strongly agree
724	(259) 75.	The quantity of output of your work group is very high.
725	(260) 76.	The quality of output of your work group is very high.
726	(261) 77.	When high priority work arises, such as short suspenses, crash programs, and schedule changes, the people in my work group do an outstanding job in handling these situations.
727	(262) 78.	There is a bottleneck in my organization that seriously affects the flow of work either to or from my work group.
728	(263) 79.	Your work group is frequently involved in crash programs, short suspenses, schedule changes, etc.

		0 = Not applicable	4 = Neither agree nor disagree
		1 = Strongly disagree	5 = Slightly agree
		2 = Moderately disagree	6 = Moderately agree
		3 = Slightly disagree	7 = Strongly agree
N/A Response Variable			
729	(264)	80. Your work group always gets maximum output from available resources (e.g., personnel and material).	
730	(265)	81. Your work group's performance in comparison to similar work groups is very high.	

SUPERVISOR INVENTORY

Instructions

The statements below describe characteristics of managers or supervisors. Indicate your agreement by choosing the statement below which best represents your attitude concerning your supervisor.

0 = Not applicable	4 = Neither agree nor disagree
1 = Strongly disagree	5 = Slightly agree
2 = Moderately disagree	6 = Moderately agree
3 = Slightly disagree	7 = Strongly agree

Select the corresponding number and mark your answer on the separate answer sheet.

N/A Response Variable		
731	(403)	82. My supervisor tells me exactly what he expects me to do.
732	(404)	83. My supervisor is a good planner.
733	(405)	84. My supervisor sets high performance standards.
734	(406)	85. My supervisor's group meetings are well planned with specific objectives.
735	(407)	86. My supervisor encourages goal setting within our group.
736	(408)	87. My supervisor informs me of changes in advance.
737	(409)	88. My supervisor is consistent in predicting events in our organization.
738	(410)	89. My supervisor encourages teamwork.
739	(411)	90. My supervisor represents the group at all times.
740	(412)	91. My supervisor establishes good work procedures.
741	(413)	92. My supervisor has made his responsibilities clear to the group.
742	(414)	93. My supervisor fully explains procedures to each group member when appropriate.
743	(415)	94. My supervisor's directions must be followed exactly.
744	(416)	95. My supervisor performs well under pressure.
745	(417)	96. My supervisor usually makes decisions without group discussion.
746	(418)	97. My supervisor encourages me toward greater accomplishment.
747	(419)	98. My supervisor overemphasizes the need to accomplish more than other groups.
748	(420)	99. My supervisor resolves conflicts within the group.
749	(421)	100. My supervisor over controls my work.

		0 = Not applicable	4 = Neither agree nor disagree
		1 = Strongly disagree	5 = Slightly agree
		2 = Moderately disagree	6 = Moderately agree
		3 = Slightly disagree	7 = Strongly agree
N/A Response Variable			
750	(422)	101. My supervisor is approachable.	
751	(423)	102. My supervisor tries to make the work more satisfying for group members.	
752	(424)	103. My supervisor takes time to help me when needed.	
753	(425)	104. My supervisor respects work group members' opinions in his decision making.	
754	(426)	105. My supervisor asks members for their ideas on task improvements.	
755	(427)	106. My supervisor is very interested in helping me resolve my problems.	
756	(428)	107. My supervisor explains how my job contributes to the overall mission.	
757	(429)	108. My supervisor helps to stimulate enthusiasm for the job.	
758	(430)	109. My supervisor focuses on major goals.	
759	(431)	110. My supervisor helps me set specific goals.	
760	(432)	111. My supervisor is consistent in his managerial behavior.	
761	(433)	112. My supervisor lets me know when I am doing a good job.	
762	(434)	113. My supervisor lets me know when I am doing a poor job.	
763	(435)	114. My supervisor always helps me improve my performance.	
764	(436)	115. My supervisor insures that I get job related training when needed.	
765	(437)	116. My job performance has improved due to feedback received from my supervisor.	
766	(438)	117. My supervisor encourages ideas for improving procedures.	
767	(439)	118. When I need technical advice I usually go to my supervisor.	
768	(440)	119. My supervisor is an effective manager.	
769	(441)	120. My supervisor keeps me informed of changes that affect my job.	
770	(442)	121. My supervisor frequently gives me feedback on how well I am doing my job.	
771	(443)	122. My supervisor usually supports my decisions.	

ORGANIZATION CLIMATE INVENTORY

Instructions

Below are items which describe characteristics of your organization. Indicate your agreement by choosing the statement below which best represents your opinion concerning your organization.

1 = Strongly disagree	5 = Slightly agree
2 = Moderately disagree	6 = Moderately agree
3 = Slightly disagree	7 = Strongly agree
4 = Neither agree nor disagree	

Select the corresponding number and enter it on the separate answer sheet.

(102) 123. Ideas developed by your work group are readily accepted by management personnel above your supervisor.

1 = Strongly disagree 5 = Slightly agree
2 = Moderately disagree 6 = Moderately agree
3 = Slightly disagree 7 = Strongly agree
4 = Neither agree nor disagree

(103) 124. Your organization provides all the necessary information for you to do your job effectively.

(104) 125. Your organization provides adequate and accurate information to your work group.

(105) 126. Our work unit is usually aware of important events and situations.

(106) 127. Your complaints are aired satisfactorily.

(107) 128. Your organization is very effective in planning the work to be accomplished.

(108) 129. Your organization is better run now than in the past.

(109) 130. Your organization is very interested in the attitudes of the group members toward their jobs.

(110) 131. Your organization has a very strong interest in the welfare of its people.

(111) 132. I am very proud to work for this organization.

(112) 133. I feel responsible to my organization in accomplishing its mission.

(113) 134. The information in your organization is widely shared so that those needing it have it available.

(114) 135. The people affected by decisions are asked for their ideas before the decisions are made.

(115) 136. Personnel in my unit are recognized for outstanding performance.

(116) 137. I am usually given the opportunity to present the results of my work to others.

(117) 138. There is a high spirit of teamwork that exists between co-workers.

(118) 139. There is outstanding cooperation between work groups of your organization.

(119) 140. My supervisor's boss is aware of the needs of my work group.

(120) 141. This organization has clear-cut, reasonable goals.

(121) 142. I feel motivated to contribute my best efforts to the mission of this organization.

(122) 143. This organization rewards individuals based on performance.

(123) 144. Rules and regulations of this organization help me to perform my job.

(124) 145. This organization insures that I have the necessary supplies to adequately accomplish my job.

JOB SATISFACTION QUESTIONNAIRE

Instructions

The items below relate to your job or the Air Force as a profession. Indicate how satisfied or dissatisfied you are with each item. Choose the statement below which best describes your degree of satisfaction or dissatisfaction.

N/A Response Variable			0 = Not applicable	4 = Neither satisfied or dissatisfied
			1 = Extremely dissatisfied	5 = Slightly satisfied
			2 = Moderately dissatisfied	6 = Moderately satisfied
			3 = Slightly dissatisfied	7 = Extremely satisfied
	772	(704)	146. Information on Policies and Procedures The adequacy and availability of information on policies, such as promotion or other organization policies.	
	773	(705)	147. Feeling of Helpfulness The chance to help people and improve their welfare through the performance of your job. The importance of your job performance to the welfare of others.	
	774	(706)	148. Control of Others (Non-Supervisory) The chance to tell others what to do. The control your job gives you over material.	
	775	(707)	149. Characteristics of the Local Area The geographical area in which you work, weather in the local area, recreational opportunities available, and the size of the surrounding community.	
	776	(708)	150. Social Contact Opportunity to meet new people, the amount and the meaningfulness of social contacts required by the job.	
	777	(709)	151. Co-Worker Relationships Your amount of effort compared to the effort of your co-workers, the extent to which your co-workers share the load, and the spirit of teamwork which exists between your co-workers.	
	778	(710)	152. Family Attitude Toward Job The recognition and the pride your family has in the work you do.	
	779	(711)	153. On-the-Job Training (OJT) The OJT instructional methods and instructors' competence.	
	780	(712)	154. Technical Training (Other than OJT) The technical training you have received to perform your current job.	
	781	(713)	155. Moral Acceptability of Job The chance to do things not violating your sense of "right and wrong."	
	782	(714)	156. Self-Improvement Opportunities The educational and recreational opportunities provided in the surrounding community, and the opportunity provided by the Air Force for self-improvement education.	
	783	(715)	157. Verbal and Written Communication The amount of required telephone communication and required paperwork in your job.	
	784	(716)	158. Work Itself The challenge, interest, importance, variety, and feelings of accomplishment you receive from your work.	

			0 = Not applicable	4 = Neither satisfied or dissatisfied
			1 = Extremely dissatisfied	5 = Slightly satisfied
			2 = Moderately dissatisfied	6 = Moderately satisfied
			3 = Slightly dissatisfied	7 = Extremely satisfied
N/A Response				
Variable				
785	(717)	159.	Work Schedule	Your work schedule; flexibility and regularity of your work schedule; the number of hours you work per week.
786	(718)	160.	Job Security	
787	(719)	161.	Acquired Valuable Skills	The chance to acquire valuable skills in your job which prepare you for future opportunities.
788	(720)	162.	Base Exchange Services	At your base.
789	(721)	163.	Commissary	At your base.
790	(722)	164.	Medical Facilities	At your base.
791	(723)	165.	Your Job as a Whole	

APPENDIX B: FACTOR SCORE COEFFICIENTS

ORGANIZATIONAL CLIMATE INVENTORY FACTOR ANALYSIS

COEFFICIENTS - FACTOR SCORES

V830 General Organizational Climate →
V831 Organizational Communications Climate →

VAR.	FACTOR 1	FACTOR 2
102	• 02694	• 11616
103	• 23434	• 37289
104	• 22226	• 36437
105	• 13252	• 26237
106	• 03820	• 05503
107	• 08620	• 20145
108	• 08105	• 01670
109	• 10658	• 02387
110	• 12810	• 04851
111	• 16869	• 10001
112	• 19687	• 15355
113	• 02265	• 12938
114	• 07227	• 00892
115	• 14798	• 08836
116	• 16416	• 11117
117	• 15240	• 09568
118	• 06332	• 01617
119	• 05401	• 02120
120	• 04395	• 04264
121	• 0679	• 15493
122	• 15624	• 09094
123	• 07206	• 00285
123	• 08239	• 18263

JOB SATISFACTION FACTOR ANALYSIS

COEFFICIENTS - FACTOR SCORES

VAR.	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4
704	-.09611	.19307	.10366	.02456
705	.04525	.07675	.11260	-.08621
706	-.02890	.07600	.20747	-.09113
707	-.17664	-.18096	.61207	.01459
708	-.06400	-.08958	.42648	-.04551
709	-.01500	.10529	.12006	-.03226
710	.13306	-.00782	.01823	-.02556
711	-.15688	.52794	-.16679	.01707
712	-.14868	.50662	-.14022	.00036
713	.05813	.11922	.01148	-.03258
714	.05418	-.02654	.11693	.02027
715	.15846	-.05224	-.04205	.04806
716	.19492	-.01699	-.00682	-.08642
717	.36920	-.21715	-.19197	.03768
718	.30917	-.17858	-.14175	.03886
719	.19193	.01953	-.11315	-.00381
720	-.10325	-.00779	.06032	.40282
721	-.03587	-.03904	-.05177	.46178
722	.04584	-.01465	.15505	.38178
723	.21746	-.04036	-.02736	-.06233

PERCEIVED PRODUCTIVITY FACTOR ANALYSIS			
	COEFFICIENTS - FACTOR SCORES		
VAR.	FACTOR 1	FACTOR 2	FACTOR 3
269	*23215	*12132	
280	*27008	-.04725	
281	*25363	-.01404	
282	-.08183	*63557	
283	*07323	*62665	
284	*23259	-.04819	
285	*26229	-.01092	

JOB INVENTORY FACTOR ANALYSIS							
COEFFICIENTS - FACTOR SCORES							
VAR.	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6	FACTOR 7
201	.11435	-.07419	-.02555	.03327	-.00005	.20883	-.0134
202	*.08442	-.06194	-.06311	.06760	-.07137	.19785	*.08516
203	*.17375	*.00198	-.02996	-.00188	-.09977	.10376	*.05819
204	-.111220	*.00185	-.01396	*.02120	-.005030	-.02458	*.04016
205	*.06244	-.02220	-.08649	*.14768	-.00888	*.00635	*.03100
206	-.03119	*.00161	-.00131	*.01905	*.01591	*.26482	*.08449
207	-.06880	*.01791	-.01931	-.02612	-.01910	-.03698	-.06226
208	*.06514	*.01379	-.07278	-.05989	-.00322	*.04664	*.06800
209	*.07010	*.04465	-.07593	*.09372	-.00353	*.01492	*.03123
210	*.17321	*.02376	-.02643	*.08464	-.010435	-.04960	*.04373
211	*.04642	-.02247	-.02678	*.0574	-.11771	*.00118	*.03949
212	*.08642	-.04007	-.01123	*.02426	-.01113	*.21431	-.05257
213	-.08920	*.04005	-.01904	*.02961	-.02951	-.01590	*.04462
214	*.03398	*.05546	*.03519	*.00813	*.02954	*.00223	*.01911
215	*.23416	*.00339	-.06134	-.03954	*.0167	*.10424	-.07034
216	*.14944	*.02149	-.02114	*.06889	-.00608	*.12584	*.04513
217	*.06326	*.00112	*.00042	*.01681	*.07795	*.33486	-.02181
218	*.01226	*.17871	-.07558	*.02516	*.03492	*.06239	*.02649
219	-.01226	*.00702	-.02820	*.02282	*.02102	*.14222	*.01912
220	*.12555	*.00121	*.01498	*.01480	*.0326	*.14805	*.02045
221	*.12314	*.04242	*.01097	-.02274	*.10982	*.01552	*.00497
222	*.04241	*.25892	*.01097	*.01997	*.09653	*.03780	*.08777
223	*.02595	*.31598	-.05339	*.01992	*.06814	*.02263	*.02657
224	*.02946	*.35957	*.06221	*.05932	*.06814	*.02092	*.11277
225	*.03872	*.27424	-.05010	*.0466	*.03023	*.02092	*.03363
226	*.04182	*.00835	-.01338	*.00928	*.01530	*.42502	*.43639
227	*.02088	*.02353	*.02885	*.08023	*.08661	*.08232	*.26059
228	-.00846	*.03578	*.01267	*.01619	*.03670	*.24615	*.26059
229	*.09164	*.11539	*.05310	*.03700	*.02850	*.09778	*.03661
230	*.11765	*.00450	*.05494	*.01448	*.06977	*.12989	*.01365
231	*.08147	*.06865	*.11334	*.07611	*.03308	*.04195	*.00055
232	*.07444	*.11145	*.12117	*.01587	*.02359	*.01336	*.01723
233	*.02387	*.03267	*.01084	*.07269	*.03013	*.01073	*.01004
234	*.12605	*.03810	*.01217	*.012730	*.11674	*.09035	*.05322
235	*.03917	*.08774	*.18104	*.01880	*.02794	*.05715	*.03010
236	-.06826	*.02495	*.41162	*.00700	*.10354	*.00797	*.03220
237	*.06319	*.09448	*.4485	*.01533	*.08634	*.03014	*.02042
238	*.07417	*.06345	*.36110	*.01060	*.05070	*.02906	*.01214
239	*.06056	*.00816	*.12120	*.07643	*.50076	*.06255	*.04244
240	*.01048	*.05159	*.01712	*.02933	*.37773	*.04227	*.02959
241	*.07695	*.00857	*.00613	*.01443	*.26467	*.01941	*.03115
242	*.07357	*.02676	*.05236	*.05358	*.00048	*.07683	*.02671
243	*.20212	*.00342	*.07156	*.00520	*.08172	*.14379	*.10140
244	*.22056	*.00782	*.06128	*.01113	*.03855	*.12454	*.09151

V846 Meaningful/Responsible Work

NEED FOR ENRICHMENT FACTOR ANALYSIS
COEFFICIENTS - FACTOR SCORES

VAR.	FACTOR 1	FACTOR 2
249	• 14685	• 04236
250	• 16312	- • 04209
251	• 16370	- • 04953
252	• 17616	- • 00555
253	• 17480	• 02349
254	• 15647	- • 06674
255	• 06121	• 56505
256	• 16134	• 16146
257	• 14643	• 08702
258	• 07012	• 55369

V849 Autonomous Control

V848 Supervisor Assistance/Feedback

V847 Management/Supervision

SUPERVISOR INVENTORY FACTOR ANALYSIS

COEFFICIENTS - FACTOR SCORES

VAR.	FACTOR 1	FACTOR 2	FACTOR 3
403	.12423	-.08194	.14442
404	.16686	-.12475	.00782
405	.16623	-.12352	.07848
406	.12549	-.08591	.00163
407	.07832	-.02842	.03163
408	.07419	-.03167	-.02836
409	.09645	-.05349	.00312
410	.11061	-.06629	.00676
411	.14893	-.10937	-.00288
412	.14441	-.09924	.00694
413	.15924	-.11549	.04326
414	.12536	-.08012	.01663
415	.18391	-.14945	.26122
416	.16660	-.13168	-.01644
417	.07582	-.06616	.24875
418	-.00288	.05834	.03416
419	-.07196	.11488	.30662
420	.07508	-.03240	.01545
421	-.06735	.08618	.31099
422	.05904	-.03028	-.11543
423	.01354	.03455	-.04824
424	.03360	.00971	-.06454
425	.01083	.02987	-.11514
426	-.02055	.06607	-.09326
427	-.01656	.06811	-.04887
428	-.07275	.13578	.04772
429	-.05193	.11209	-.00551
430	.00670	.04765	.04453
431	-.10659	.17361	.05465
432	.04871	-.00772	-.03126
433	-.11605	.17490	-.02940
434	-.012947	.18460	.17826
435	-.012804	.19836	.04501
436	-.13150	.19515	.04603
437	-.14437	.21259	.04320
438	-.06361	.11917	-.04129
439	-.05461	.10566	.04999
440	.06451	-.01460	-.01944
441	.00587	.04659	-.01155
442	-.13450	.19931	.01446
443	-.00856	.04655	-.10795

APPENDIX C: FACTOR SCORE ESTIMATION EQUATIONS (ANALYSIS 1) 16)

REGRESSION PROBLEM 1 ANALYSIS 1		DEPENDENT	218	F0798	V830		
NUMBER OF PREDICTORS		10				STOP = 20	TOL = .0010000
FORCED PREDICTORS		8	11	13	16	20	21
						STEP NUMBER	10
MULTIPLE R ²		.927113	.918172	.9179867	-.0104078		
VAR = 13		F0114					
PREDICTOR SYSTEM:							
PREDICTOR VARIABLE	MEAN	STANDARD DEVIATION	REGRESSION WEIGHT	REGRESSION WEIGHT	REGRESSION WEIGHT	STD. DEV. OF REG WT	SQ. PARTIAL CORRELATION VARIABLE VS REST
1 F0109	4.264880	1.868421	0.01570	0.03046	0.050154	.0084455	.012755
2 F0110	4.5163235	1.687056	0.024948	0.024948	0.07994	.012076	.001134
3 F0111	4.025157	1.707913	0.03321	0.049051	0.0704	.01505	.002123
4 F0112	5.562228	1.4421955	0.01991	0.06052	0.07258	.01262	.00234
5 F0113	3.881066	1.799470	0.011402	0.06360	0.06503	.000350	.01344
6 F0114	3.071810	1.916139	0.01749	0.05938	0.05929	.026201	.00041
7 F0115	4.399659	1.730942	0.038302	0.07931	0.03359	.054704	.00452
8 F0116	3.622725	1.6720381	0.0249673	0.0249673	0.00221	.05219	.01005
9 F0121	5.168552	1.705670	0.123149	0.07327	0.03746	.052020	.007521
10 F0122	5.210168	1.6822325	0.119278	0.07333	0.07211	.036502	.017086
11 F0123	5.210168	1.6822325	0.119278	0.07333	0.07211	.036502	.006550
STEP NUMBER		10	(FINAL)				

REGRESSION PROBLEM 2 ANALYSIS 2		DEPENDENT	219	F0798	V831		
NUMBER OF PREDICTORS		5				STOP = 10	TOL = .0010000
FORCED PREDICTORS		2*	4	6	12		
						STEP NUMBER	5
MULTIPLE R ²		.937468	.929952	.919163	-2.999977		
VAR = 12		F0113					
PREDICTOR SYSTEM:							
PREDICTOR VARIABLE	MEAN	STANDARD DEVIATION	REGRESSION WEIGHT	REGRESSION WEIGHT	REGRESSION WEIGHT	STD. DEV. OF REG WT	SQ. PARTIAL CORRELATION VARIABLE VS REST
2 F0101	4.414371	1.645895	0.08512	0.07057	0.07009	.247908	.644073
3 F0102	4.669350	1.532335	0.339723	0.210236	0.089192	-.142004	-.023618
4 F0103	5.080087	1.502114	0.202451	0.126751	0.07248	-.100519	.557151
6 F0107	4.552269	1.664968	0.137473	0.087614	0.03563	.061219	.01085
12 F0113	4.746632	1.647097	0.046505	0.03900	0.04886	.012120	.001974
STEP NUMBER		5	(FINAL)				

REGRESSION PROBLEM 3 ANALYSIS 3																	
NUMBER OF PREDICTORS		DEPENDENT 220 F0800 V832						STOP = 90									
FORCED PREDICTORS		130, 136, 139, 145, 149, 189, 204, 207-211, 217						TOL = .00100000									
<hr/>																	
MULTIPLE REGRESSION																	
STU EHR LST		ERR MEAN SQ.		REG CONST		DF		SUM OF SQ.									
MULTIPLE REGRESSION		MEAN		STANDARD		ANALYSIS OF VARIANCE		MEAN SQ.									
PREDICTOR SYSTEM:		MEAN		STANDARD		F-RATIO		PROBABILITY									
PREDICTOR VARIABLE		DEVIATION		WEIGHT		INDEPENDENT		CONTRIBUTION									
131 F0705	5.012769	1.679130	-1.015337	-.007943	.006799	.007786	.49570	.000119									
134 F0710	4.077453	2.02184	.010145	+.052616	.004663	.027949	.578373	.004329									
139 F0713	5.184604	1.618767	-.011584	-.011584	.006466	.001116	.452220	.001149									
140 F0714	5.362641	1.611873	-.0043345	-.02814	.005981	.008431	.416810	.001382									
141 F0715	5.555204	1.674013	-.053084	-.053084	.00795	.024948	.326444	.004498									
142 F0716	5.000000	1.869863	-.083421	-.105019	.007505	.087158	.674890	.01056									
143 F0717	4.933986	1.491866	-.393534	-.220373	.005104	.405958	.334988	.020552									
144 F0718	5.116381	1.785652	-.665738	-.159111	.005556	.231673	.356108	.04670									
145 F0719	4.919162	1.972654	1.36726	-.075458	.006117	.461660	.62213	.010004									
149 F0723	4.947165	1.499613	1.58449	-.089206	.007419	.049797	.49744	.007519									
199 F0733	4.010580	1.102319	-.0000000	-.0000000	.000000	.000000	.124854	.000000									
204 F0778	4.052536	2.223103	-.005210	-.022365	.008921	.000000	.418240	.000000									
207 F0781	.006912	4.062968	-.010205	-.131504	.001045	.000519	.161677	.000007									
208 F0782	.004013	4.025312	-.025322	-.025322	.000002	.000002	.200322	.000002									
209 F0783	.008753	4.053162	-.016130	-.016130	.000000	.000000	.110194	.000000									
210 F0784	.000730	4.061747	-.061747	-.061747	.000000	.000000	.015227	.000003									
211 F0785	.001094	4.033062	-.0033062	-.0033062	.000000	.000000	.062497	.000000									
212 F0786	.0006202	4.078569	-.003327	-.0123852	.000000	.000000	.748683	.000000									
213 F0787	.006202	4.078569	-.009095	-.049900	.004607	.000000	.084750	.000010									
217 F0791	.002189	4.061735	-.004038	-.049827	.001075	.000000	.134894	.000071									
<hr/>																	
MULTIPLE REGRESSION																	
STU EHR LST		ERR MEAN SQ.		REG CONST		DF		SUM OF SQ.									
MULTIPLE REGRESSION		MEAN		STANDARD		ANALYSIS OF VARIANCE		MEAN SQ.									
PREDICTOR SYSTEM:		MEAN		STANDARD		F-RATIO		PROBABILITY									
PREDICTOR VARIABLE		DEVIATION		WEIGHT		INDEPENDENT		CONTRIBUTION									
82 F025*	5.498356	1.205584	-.226573	-.156000	.001660	.763858	.529933	.013404									
83 F0240	5.770527	1.417324	-.025258	-.018221	.002180	.734877	.593155	.028226									
84 F0241	5.665347	1.649552	-.291270	-.186773	.001773	.766432	.600003	.033986									
87 F0244	4.885162	1.801884	-.238244	-.138161	.001406	.456013	.314581	.029584									
88 F0245	5.681340	1.537322	-.266495	-.179226	.002092	.738397	.589584	.029587									
150 F0724	.010281	4.171358	-.012230	-.024925	.014351	.007552	.473954	.000019									
151 F0725	.007661	4.07194	-.012552	-.030287	.010219	.000363	.424332	.000004									
152 F0726	.021890	4.163224	-.007120	-.150846	.018256	.002833	.521189	.000010									
154 F0727	.005837	4.061739	-.004028	-.055253	.003027	.001191	.791274	.000012									
156 F0730	.013864	4.169249	-.004764	-.042578	.022199	.001346	.386337	.000019									
<hr/>																	
MULTIPLE REGRESSION																	
STU EHR LST		ERR MEAN SQ.		REG CONST		DF		SUM OF SQ.									
MULTIPLE REGRESSION		MEAN		STANDARD		ANALYSIS OF VARIANCE		MEAN SQ.									
PREDICTOR SYSTEM:		MEAN		STANDARD		F-RATIO		PROBABILITY									
PREDICTOR VARIABLE		DEVIATION		WEIGHT		INDEPENDENT		CONTRIBUTION									
101 F0801	4.633																
<hr/>																	
REGRESSION PROBLEM 4 ANALYSIS 4																	
NUMBER OF PREDICTORS		DEPENDENT 221 F0801 V833						STOP = 20									
FORCED PREDICTORS		10, 44, 87- 88, 150-152, 155-156						TOL = .00100000									
<hr/>																	
MULTIPLE REGRESSION																	
STU EHR LST		ERR MEAN SQ.		REG CONST		DF		SUM OF SQ.									
MULTIPLE REGRESSION		MEAN		STANDARD		ANALYSIS OF VARIANCE		MEAN SQ.									
PREDICTOR SYSTEM:		MEAN		STANDARD		F-RATIO		PROBABILITY									
PREDICTOR VARIABLE		DEVIATION		WEIGHT		INDEPENDENT		CONTRIBUTION									
101 F0801	4.633																
<hr/>																	
REGRESSION PROBLEM 5 ANALYSIS 5																	
NUMBER OF PREDICTORS		DEPENDENT 201 F0800 V817						STOP = 20									
FORCED PREDICTORS		10, 44, 87- 88, 150-152, 155-156						TOL = .00100000									
<hr/>																	
MULTIPLE REGRESSION																	
STU EHR LST		ERR MEAN SQ.		REG CONST		DF		SUM OF SQ.									
MULTIPLE REGRESSION		MEAN		STANDARD		ANALYSIS OF VARIANCE		MEAN SQ.									
PREDICTOR SYSTEM:		MEAN		STANDARD		F-RATIO		PROBABILITY									
PREDICTOR VARIABLE		DEVIATION		WEIGHT		INDEPENDENT		CONTRIBUTION									
101 F0801	4.633																
<hr/>																	
REGRESSION PROBLEM 6 ANALYSIS 6																	
NUMBER OF PREDICTORS		DEPENDENT 201 F0800 V817						STOP = 20									
FORCED PREDICTORS		10, 44, 87- 88, 150-152, 155-156						TOL = .00100000									
<hr/>																	
MULTIPLE REGRESSION																	
STU EHR LST		ERR MEAN SQ.		REG CONST		DF		SUM OF SQ.									
MULTIPLE REGRESSION		MEAN		STANDARD		ANALYSIS OF VARIANCE		MEAN SQ.									
PREDICTOR SYSTEM:		MEAN		STANDARD		F-RATIO		PROBABILITY									
PREDICTOR VARIABLE		DEVIATION		WEIGHT		INDEPENDENT		CONTRIBUTION									
101 F0801	4.633																
<hr/>																	
REGRESSION PROBLEM 7 ANALYSIS 7																	
NUMBER OF PREDICTORS		DEPENDENT 201 F0800 V817						STOP = 20									
FORCED PREDICTORS		10, 44, 87- 88, 150-152, 155-156						TOL = .00100000									
<hr/>																	
MULTIPLE REGRESSION																	
STU EHR LST		ERR MEAN SQ.		REG CONST		DF		SUM OF SQ.									
MULTIPLE REGRESSION		MEAN		STANDARD		ANALYSIS OF VARIANCE		MEAN SQ.									

REGRESSION PROBLEM 7 ANALYSIS 7
 NUMBER OF PREDICTORS 4
 FORCED PREDICTORS 27, 36, 37, 71
 DEPENDENT 224 0804 1842
 STEP NUMBER 4

 -

MULTIPLE RSQ STD ERR EST ERN MEAN SQ.
 .778316 .457597 .209395 -2.062384 REG CONST
 VAR = 71 F0248 RESIDUAL
 PREDICTOR SYSTEM:
 VARIABLE MEAN STANDARD DEVIATION
 27 F0204 4.021140 1.084160
 36 F0213 4.11805 1.47509
 37 F0214 4.281649 1.491072
 71 F0248 4.052409 1.700312

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ANALYSIS OF VARIANCE
 DF SUM OF SQ. MEAN SQ. F-RATIO PROBABILITY
 2734 522.07905 2401.4723 .00000000
 2735 522.07975
 STD. DEV. SQ. PARTIAL SQ. CORRELATION INDEPENDENT
 OF REG WT CORRELATION VARIABLE VS REST CONTRIBUTION
 .006530 .311292 .195088 .103200
 .007935 .276627 .172355 .081775
 .007644 .083867 .053345 .020330
 .006410 .05490 .045640 .013587

 -

STEP NUMBER 4 (FINAL) -----

STOP * 8
 TOL = .00100000

REGRESSION PROBLEM 8 ANALYSIS 8
 NUMBER OF PREDICTORS 4
 FORCED PREDICTORS 57, 62, 64
 DEPENDENT 225 F0085 V043
 STEP NUMBER 1 -----

MULTIPLE RSQ STD ERR EST ERN MEAN SQ.
 .764054 .4949862 .244669 -2.016460 REG CONST
 VAR = 64 F0241 RESIDUAL
 PREDICTOR SYSTEM:
 VARIABLE MEAN STANDARD DEVIATION
 57 F0334 5.168252 1.607491
 62 F0139 5.134455 1.634674
 63 F0240 4.595918 1.716818
 64 F0241 4.017512 1.716404

 -

ANALYSIS OF VARIANCE
 DF SUM OF SQ. MEAN SQ. F-RATIO PROBABILITY
 2736 670.01590 2214.9716 .00000000
 2737 24498805
 STD. DEV. SQ. PARTIAL SQ. CORRELATION INDEPENDENT
 OF REG WT CORRELATION VARIABLE VS REST CONTRIBUTION
 .005792 .13604 .26030 .073248
 .00583 .32326 .113236
 .005967 .145539 .37621 .001188
 .00623 .054916 .304930 .013710

 -

STEP NUMBER 1 (FINAL) -----

STOP * 8
 TOL = .00100000

REGRESSION PROBLEM 9 ANALYSIS 9																	
		DEPENDENT 224 F0806 V844						STOP = .4 TOL = .0010000									
		NUMBER OF PREDICTORS 7 25, 29, 35, 41, 51, 53															
<hr/>																	
MULTIPLE R29 STD. ERR. EST. - EER MEAN SQ.																	
REG CONST		DF		SUM OF SQ. ANALYSIS OF VARIANCE		MEAN SQ.		F-RATIO PROBABILITY									
-2.129092		7		2049.8696		297.08137		1276.2946									
<hr/>																	
VAR = 53 F0230		REGRESSION		RESIDUAL		2731		627.0738									
		STD. DEV.		SQ. PARTIAL CORRELATION		VARIABLE VS REST		INDEPENDENT CONTRIBUTION									
STANDARD		REGRESSION WEIGHT															
MEAN		OF REG WT															
<hr/>																	
24 F0201	5.011226	1.508614	.0738795	.0046463	.026451	.495761	.006114										
25 F0202	5.037055	1.522759	.211129	.005113	.051794	.233364	.022359										
26 F0204	3.461211	1.735558	.247454	.005113	.051794	.051784	.176279										
27 F0212	4.531626	1.585957	.127012	.007115	.049412	.475205	.008474										
28 F0214	3.459113	1.481141	.005555	.004774	.038612	.148520	.134758										
29 F0220	4.751614	1.289226	.208918	.007407	.214816	.129037	.040686										
30 F0230	5.226742	1.410134	.0188827	.012653	.001034	.001034	.000266										
<hr/>																	
STEP NUMBER 7 (FINAL)		STEP NUMBER 7 (FINAL)		STEP NUMBER 7 (FINAL)		STEP NUMBER 7 (FINAL)		STEP NUMBER 7 (FINAL)									
<hr/>																	
REGRESSION PROBLEM 10 ANALYSIS 10																	
		DEPENDENT 227 F0807 V845						STOP = .4 TOL = .0010000									
		NUMBER OF PREDICTORS 2															
		FORCED PREDICTIONS 40- 50															
<hr/>																	
MULTIPLE R29 STD. ERR. EST. - EER MEAN SQ.		REG CONST		DF		SUM OF SQ. ANALYSIS OF VARIANCE		MEAN SQ.									
7 .035464		REGRESSION		2		221.8613		1108.4207									
-2.099214		RESIDUAL		2718		1241.59282		6951.3459									
<hr/>																	
VAR = 30 F0227		REGRESSION		STD. DEV.		SQ. PARTIAL CORRELATION		INDEPENDENT CONTRIBUTION									
STANDARD		REGRESSION WEIGHT		VARIABLE VS REST													
MEAN		OF REG WT															
<hr/>																	
29 F0226	4.990084	1.561139	.346516	.005912	.597150	.320840	.199557										
30 F0227	4.722365	1.534134	.312038	.005029	.449205	.220860	.167913										
<hr/>																	
STEP NUMBER 2 (FINAL)		STEP NUMBER 2 (FINAL)		STEP NUMBER 2 (FINAL)		STEP NUMBER 2 (FINAL)		STEP NUMBER 2 (FINAL)									
<hr/>																	

REGRESSION PROBLEM 11 ANALYSIS 11									
DEPENDENT 228 F0808 V846					STOP = 10				
NUMBER OF PREDICTORS 5		STD. ERR. EST.			REGRESSION			TOTAL = .00100000	
FORCED PREDICTORS 73-77		RESIDUAL			STEP NUMBER 5			-----	
MULTIPLE R²									
VAR = 7% F0251		REG CONST	REG MEAN SQ.	OF	SUM OF SQ.	MEAN SQ.	F-RATIO	PROBABILITY	
		*.271594	*.073736	-26.800241	REGRESSION	5	2339.2773	.466.85546	6.331.4539
				RESIDUAL	2735	201.46729	7.27235901-01		
PREDICTOR SYSTEM:									
PREDICTOR VARIABLE	MEAN	STANDARD DEVIATION	STANDARD WEIGHT	REGRESSION	STD. DEV. OF REG WT	SB. PARTIAL CORRELATION VARIABLE VS REST	INDEPENDENT CONTRIBUTION		
73 F0250	5.748997	1.489996	.212807	-1.137403	.0064038	-159.214	.667976	.010589	
74 F0251	5.540015	1.622491	.105400	.1109162	.005895	.111924	.720300	.010020	
75 F0252	5.718351	1.457977	.226152	.144902	.004812	.175589	.727151	.015720	
76 F0253	5.545221	1.471551	.227761	.181413	.004321	.201922	.431970	.020211	
77 F0254	5.483400	1.715483	.165682	.012914	.004983	.112775	.431160	.010110	
				STEP NUMBER 5 (FINAL)					
REGRESSION PROBLEM 12 ANALYSIS 12									
DEPENDENT 229 F0809 V847									STOP = 24
NUMBER OF PREDICTORS 16									TOTAL = .00100000
FORCED PREDICTORS 90-91, 96-100, 102, 115-159, 164-168, 170									
MULTIPLE R²									
VAR = 15% F0233		REG CONST	REG MEAN SQ.	OF	SUM OF SQ.	MEAN SQ.	F-RATIO	PROBABILITY	
		*.271499	*.073737	-26.959947	REGRESSION	16	2038.3737	127.38636	469.74033
				RESIDUAL	2724	739.56314	.22149917		
PREDICTOR SYSTEM:									
PREDICTOR VARIABLE	MEAN	STANDARD DEVIATION	STANDARD WEIGHT	REGRESSION	STD. DEV. OF REG WT	SB. PARTIAL CORRELATION VARIABLE VS REST	INDEPENDENT CONTRIBUTION		
90 F0404	4.9801304	1.742308	.172418	.098226	.010802	.001016	.720119	.000464	
91 F0405	5.2402705	1.611339	.151110	.091157	.009395	.038710	.562745	.000275	
94 F0410	5.2070464	1.715562	.051005	.031647	.009412	.009146	.611993	.001108	
97 F0411	5.020064	1.902380	....	.070490	.008657	.013740	.632693	.000477	
98 F0412	5.955491	1.759378	....	.011543	.005290	.011605	.007927	.001992	
99 F0413	5.071507	1.769655	....	.164794	.009404	.009742	.003532	.002127	
100 F0414	5.932779	1.786777	....	.010362	.009551	.00957	.000717	.000180	
102 F0416	5.3202953	1.152727	....	.110116	.010316	.010316	.011925	.000226	
158 F0732	.002189	.046737	.000453	.130412	.258443	.000193	.320940	.000081	
159 F0733	.001824	.046723	*.000954	-.022500	.278852	.000002	.300101	.000001	
164 F0738	.002823	.057208	*.023492	-.412885	.192093	.001671	.179807	.000181	
165 F0739	.001013	.043223	*.002757	-.004302	.200683	.000104	.427720	.000084	
166 F0740	.004202	.076509	*.022201	.284712	.170760	.001619	.498814	.000272	
167 F0741	.005106	.071288	*.028002	-.295316	.198010	.001231	.511500	.000162	
168 F0742	.007486	.074931	*.002680	-.216145	.131065	.000045	.379301	.000263	
170 F0744	.001459	.038175	*.013588	.358887	.294448	.000036	.226307	.001193	
				STEP NUMBER 16 (FINAL)					

REGRESSION PROBLEM 13 ANALYSIS 13										REGRESSION PROBLEM 14 ANALYSIS 14									
DEPENDENT					REGRESSOR					DEPENDENT					REGRESSOR				
NUMBER OF PREDICTORS		REG. MEAN S.E.			NUMBER OF PREDICTORS		REG. MEAN S.E.			NUMBER OF PREDICTORS		REG. MEAN S.E.			NUMBER OF PREDICTORS		REG. MEAN S.E.		
PREDICTOR	119	120	121	122	PREDICTOR	101	102	103	104	PREDICTOR	101	102	103	104	PREDICTOR	101	102	103	104
FORCED PREDICTORS	119	120	121	122	FORCED PREDICTORS	101	102	103	104	FORCED PREDICTORS	101	102	103	104	FORCED PREDICTORS	101	102	103	104
STEP NUMBER	1	2	3	4	STEP NUMBER	1	2	3	4	STEP NUMBER	1	2	3	4	STEP NUMBER	1	2	3	4
MULTIPLE R ²	.8946	.9017	.9051	.9075	MULTIPLE R ²	.8946	.9017	.9051	.9075	MULTIPLE R ²	.8946	.9017	.9051	.9075	MULTIPLE R ²	.8946	.9017	.9051	.9075
STD. ERR. EST.	.5274140	.5274240	.5274340	.5274440	STD. ERR. EST.	.5274140	.5274240	.5274340	.5274440	STD. ERR. EST.	.5274140	.5274240	.5274340	.5274440	STD. ERR. EST.	.5274140	.5274240	.5274340	.5274440
REGRESSION	-2.0219000	-2.0219000	-2.0219000	-2.0219000	REGRESSION	-2.0219000	-2.0219000	-2.0219000	-2.0219000	REGRESSION	-2.0219000	-2.0219000	-2.0219000	-2.0219000	REGRESSION	-2.0219000	-2.0219000	-2.0219000	-2.0219000
RESIDUAL	2732	2732	2732	2732	RESIDUAL	2732	2732	2732	2732	RESIDUAL	2732	2732	2732	2732	RESIDUAL	2732	2732	2732	2732
MEAN S.Q.	119.121	119.121	119.121	119.121	MEAN S.Q.	119.121	119.121	119.121	119.121	MEAN S.Q.	119.121	119.121	119.121	119.121	MEAN S.Q.	119.121	119.121	119.121	119.121
STDEV. S.Q.	.30216	.30216	.30216	.30216	STDEV. S.Q.	.30216	.30216	.30216	.30216	STDEV. S.Q.	.30216	.30216	.30216	.30216	STDEV. S.Q.	.30216	.30216	.30216	.30216
INDEPENDENT VARIABLE					INDEPENDENT VARIABLE					INDEPENDENT VARIABLE					INDEPENDENT VARIABLE				
MEAN					MEAN					MEAN					MEAN				
STANDARD DEVIATION					STANDARD DEVIATION					STANDARD DEVIATION					STANDARD DEVIATION				
REGRESSION WEIGHT					REGRESSION WEIGHT					REGRESSION WEIGHT					REGRESSION WEIGHT				
MEAN S.Q.	187.4747	187.4747	187.4747	187.4747	MEAN S.Q.	187.4747	187.4747	187.4747	187.4747	MEAN S.Q.	187.4747	187.4747	187.4747	187.4747	MEAN S.Q.	187.4747	187.4747	187.4747	187.4747
STDEV. S.Q.	.32946002	.32946002	.32946002	.32946002	STDEV. S.Q.	.32946002	.32946002	.32946002	.32946002	STDEV. S.Q.	.32946002	.32946002	.32946002	.32946002	STDEV. S.Q.	.32946002	.32946002	.32946002	.32946002
ANALYSIS OF VARIANCE					ANALYSIS OF VARIANCE					ANALYSIS OF VARIANCE					ANALYSIS OF VARIANCE				
DF	1	2	3	4	DF	1	2	3	4	DF	1	2	3	4	DF	1	2	3	4
SUM OF SQ.	234.30334	234.30334	234.30334	234.30334	SUM OF SQ.	234.30334	234.30334	234.30334	234.30334	SUM OF SQ.	234.30334	234.30334	234.30334	234.30334	SUM OF SQ.	234.30334	234.30334	234.30334	234.30334
MEAN SQ.	117.000000	117.000000	117.000000	117.000000	MEAN SQ.	117.000000	117.000000	117.000000	117.000000	MEAN SQ.	117.000000	117.000000	117.000000	117.000000	MEAN SQ.	117.000000	117.000000	117.000000	117.000000
F-RATIO	1.0000000	1.0000000	1.0000000	1.0000000	F-RATIO	1.0000000	1.0000000	1.0000000	1.0000000	F-RATIO	1.0000000	1.0000000	1.0000000	1.0000000	F-RATIO	1.0000000	1.0000000	1.0000000	1.0000000
PROBABILITY	.00000000	.00000000	.00000000	.00000000	PROBABILITY	.00000000	.00000000	.00000000	.00000000	PROBABILITY	.00000000	.00000000	.00000000	.00000000	PROBABILITY	.00000000	.00000000	.00000000	.00000000
STOP = 14					STOP = 14					STOP = 14					STOP = 14				
TOL = .00100000					TOL = .00100000					TOL = .00100000					TOL = .00100000				

REGRESSION PROBLEM 15 ANALYSIS 15									
		DEPENDENT 232 F0812 V850							
NUMBER OF PREDICTORS 4		FORCED PREDICTORS 177-186,205-206							
STEP NUMBER 1									
MULTIPLE R5Q	STD ERR EST.	ERR MEAN S9.	REG CONST.			DF	SUM OF SS.	ANALYSIS OF VARIANCE	PROBABILITY
.058276		.061733	.213197	-2.034942		4	3522.4616	883.120446	.41492694 .00000000
VAR = 205	F0779		REGRESSION			226	582.20767	213197267	
		RESIDUAL							
PREDICTOR SYSTEM:	MEAN	STANDARD DEVIATION	REGRESSION WEIGHT	REGRESSION WEIGHT	STO. DEVI. OF REG WT	SB. PARTIAL CORRELATION	SB. CORRELATION VARIABLE VS REST	INDEPENDENT CONTRIBUTION	
137 F0711	.349033	2.197935	.508686	.321993	.007116	.465224	.641273	.128570	
138 F0712	.439912	2.016103	.591347	.291706	.001493	.355383	.519356	.182952	
205 F0779	.128005	.334151	-.000288	-.001057	.030223	.000000	.622813	.000000	
206 F0780	.063495	.224977	-.002737	-.003440	.050912	.000184	.497761	.000024	
STEP NUMBER 4 (FINAL)									
REGRESSION PROBLEM 16 ANALYSIS 16									
		DEPENDENT 233 F0813 V851							
NUMBER OF PREDICTORS 4		FORCED PREDICTORS 146-148,211-216							
STEP NUMBER 4									
MULTIPLE R5Q	STD ERR EST.	ERR MEAN S9.	REG CONST.			DF	SUM OF SS.	ANALYSIS OF VARIANCE	PROBABILITY
+049280		+0293327	-0.066041	-2.510667		6	1043.7111	677.27852	.7071.8702 .00000000
VAR = 215	F0789		REGRESSION			225	2357.0	148010124.01	
		RESIDUAL							
PREDICTOR SYSTEM:	MEAN	STANDARD DEVIATION	REGRESSION WEIGHT	REGRESSION WEIGHT	STO. DEVI. OF REG WT	SB. PARTIAL CORRELATION	SB. CORRELATION VARIABLE VS REST	INDEPENDENT CONTRIBUTION	
146 F0720	.3.035097	2.049421	.350552	.211762	.000685	.499726	.600074	.00000000	
147 F0721	.3.121463	2.083907	.194252	.255210	.000420	.582270	.681010	.00000000	
148 F0788	.2784392	.301789	-.301789	-.179059	.001927	.499594	.619110	.00000000	
214 F0789	.084451	.2784945	-.023365	-.0277912	.5000064	.522221	.522221	.00000000	
215 F0790	.090493	.267384	.021127	.027082	.000634	.692026	.702026	.00000000	
216 F0790	.076984	.271134	-.037407	-.172741	.001325	.001325	.001325	.00000000	

APPENDIX D: SITUATIONAL AND SUPERVISORY INVENTORIES EQUATIONS FOR PREDICTING FOUR CRITERIA (ANALYSES 17-28)

ANSWER: The answer is 1000. The first two digits of the answer are 10.

REGRESSION PROBLEM 3 ANALYSIS 19										DEPENDENT 220		FIBLU 9832		STOP = .00100000	
NUMBER OF PREDICTORS 25														TOL = .00000000	
FREE PREDICTORS 27-29, 34-33, 35-16, 40, 43-															
PREDICTOR SYSTEM:	STD ERR EST	EW MEAN SE.	RIG CURST							STEP NUMBER	25				
PREDICTOR VARIABLE	MEAN	STANDARD DEVIATION	STANDARD DEVIATION	REGRESS10N	REGRESS10N	REGRESS10N	REGRESS10N	REGRESS10N	REGRESS10N	SUM OF SGS	1436.3208	65.4528280	116.40120	F-RATIO	PROBABILITY
2.2 F0204	4.021160	1.884160	.171034	+0.7053	+0.7053	+0.7053	+0.7053	+0.7053	+0.7053	0.01545	*0.13836	*0.13836	*0.13836	*0.13836	
2.8 F0205	4.531923	1.583824	.051956	+0.6116	+0.6116	+0.6116	+0.6116	+0.6116	+0.6116	*0.12261	*0.13184	*0.13184	*0.13184	*0.13184	
2.9 F0206	3.089121	1.735549	-0.02152	+0.8727	+0.8727	+0.8727	+0.8727	+0.8727	+0.8727	*0.08535	*0.17138	*0.17138	*0.17138	*0.17138	
3.2 F0207	5.088552	1.052152	-0.021619	+0.5916	+0.5916	+0.5916	+0.5916	+0.5916	+0.5916	*0.05051	*0.05051	*0.05051	*0.05051	*0.05051	
3.3 F0210	5.456330	1.424769	+0.67395	+0.67395	+0.67395	+0.67395	+0.67395	+0.67395	+0.67395	*0.01355	*0.01355	*0.01355	*0.01355	*0.01355	
3.5 F0211	5.924926	1.595753	+0.611511	+0.611511	+0.611511	+0.611511	+0.611511	+0.611511	+0.611511	*0.01135	*0.01135	*0.01135	*0.01135	*0.01135	
3.6 F0213	4.118705	1.675649	+0.78525	+0.78525	+0.78525	+0.78525	+0.78525	+0.78525	+0.78525	*0.01180	*0.01193	*0.01193	*0.01193	*0.01193	
3.7 F0214	4.818449	1.691027	-0.043143	+0.7277	+0.7277	+0.7277	+0.7277	+0.7277	+0.7277	*0.01277	*0.01175	*0.01175	*0.01175	*0.01175	
3.8 F0215	5.198103	1.70903	+0.70130	+0.70130	+0.70130	+0.70130	+0.70130	+0.70130	+0.70130	*0.01285	*0.01157	*0.01157	*0.01157	*0.01157	
4.0 F0217	5.969999	1.362616	-0.036559	+0.646462	+0.646462	+0.646462	+0.646462	+0.646462	+0.646462	*0.014189	*0.014189	*0.014189	*0.014189	*0.014189	
4.3 F0220	4.880700	1.476277	-0.04716	+0.55932	+0.55932	+0.55932	+0.55932	+0.55932	+0.55932	*0.01190	*0.01190	*0.01190	*0.01190	*0.01190	
4.4 F0221	4.824452	1.918230	+0.55171	+0.55171	+0.55171	+0.55171	+0.55171	+0.55171	+0.55171	*0.013959	*0.013959	*0.013959	*0.013959	*0.013959	
4.5 F0222	3.595123	1.501530	+0.74275	+0.74275	+0.74275	+0.74275	+0.74275	+0.74275	+0.74275	*0.02504	*0.02504	*0.02504	*0.02504	*0.02504	
4.6 F0223	2.450201	1.412705	+0.76553	+0.76553	+0.76553	+0.76553	+0.76553	+0.76553	+0.76553	*0.01397	*0.01397	*0.01397	*0.01397	*0.01397	
4.8 F0225	4.112368	1.640749	-0.031579	+0.05045	+0.05045	+0.05045	+0.05045	+0.05045	+0.05045	*0.01697	*0.01697	*0.01697	*0.01697	*0.01697	
4.9 F0226	4.890186	1.567843	-0.037317	+0.054947	+0.054947	+0.054947	+0.054947	+0.054947	+0.054947	*0.011525	*0.011749	*0.011749	*0.011749	*0.011749	
5.0 F0227	4.722646	1.534934	-0.042423	+0.04774	+0.04774	+0.04774	+0.04774	+0.04774	+0.04774	*0.01430	*0.01651	*0.01651	*0.01651	*0.01651	
5.2 F0228	4.008756	1.491770	-0.047137	+0.065657	+0.065657	+0.065657	+0.065657	+0.065657	+0.065657	*0.011636	*0.011550	*0.011550	*0.011550	*0.011550	
5.5 F0232	3.074879	1.389448	+0.26360	+0.028283	+0.028283	+0.028283	+0.028283	+0.028283	+0.028283	*0.11669	*0.11112	*0.11112	*0.11112	*0.11112	
5.6 F0233	5.023273	1.443592	-0.058260	+0.04404	+0.04404	+0.04404	+0.04404	+0.04404	+0.04404	*0.01205	*0.01438	*0.01438	*0.01438	*0.01438	
5.7 F0234	5.188552	1.620749	-0.031260	+0.04326	+0.04326	+0.04326	+0.04326	+0.04326	+0.04326	*0.01437	*0.01460	*0.01460	*0.01460	*0.01460	
5.8 F0243	4.074742	1.64326	-0.016051	+0.14316	+0.14316	+0.14316	+0.14316	+0.14316	+0.14316	*0.01657	*0.01745	*0.01745	*0.01745	*0.01745	
5.9 F0244	4.767238	1.779768	-0.115671	+0.9729	+0.9729	+0.9729	+0.9729	+0.9729	+0.9729	*0.016517	*0.05422	*0.05422	*0.05422	*0.05422	
7.7 F0259	5.888300	1.71583	+0.34979	+0.21375	+0.21375	+0.21375	+0.21375	+0.21375	+0.21375	*0.01Y11	*0.022678	*0.022678	*0.022678	*0.022678	
7.9 F0256	5.207288	1.496356	+0.303926	+0.21669	+0.21669	+0.21669	+0.21669	+0.21669	+0.21669	*0.010852	*0.023497	*0.023497	*0.023497	*0.023497	

REGRESSION PROBLEM #4 ANALYSIS: F4
 NUMBER OF PREDICTORS: 22
 FREE PREDICTIONS: 27, 33, 37, 40, 45, 51, 53, 55, 61, 62, 64-
 TOL = .0000000
 MULTIPLE R2W STU EHN EST FHN MEAN SIG. PTC CUST. STEP NUMBER 22
 *9.25448 *795227 *6323866 -0.3516586
 VAR = .44 F0221
 PREDICTOR SYSTEM:
 VARIABLE MEAN STANDARD DEVIATION
 47 FL2UN *0.0211640 *0.041640
 48 F0210 5.6532350 *0.21269
 49 F0214 4.2816490 *0.691072
 50 F0217 5.4938490 *0.362067
 51 F0218 3.6576130 *0.481414
 42 F0219 2.9638820 *0.537728
 43 F0220 4.9060701 *1.495767
 44 F0221 4.8241520 *1.412430
 45 F0222 3.5516232 *1.015430
 50 F0227 4.4722384 *0.531434
 51 F0228 4.4747466 *0.284926
 53 F0230 5.2674241 *0.470734
 54 F0231 4.0377660 *0.561717
 55 F0232 4.0769790 *3.3644948
 61 F0238 5.2226195 *1.294577
 62 F0239 4.1949550 *0.619487
 64 F0241 4.0175120 *1.7164114
 65 F0242 5.3327250 *0.40363
 67 F0244 4.7672238 *0.7760136
 73 F0250 5.4749970 *0.481446
 77 F0254 5.4834000 *0.7154823
 81 F0258 3.0464333 *1.557726
 PTC CUST. STEP NUMBER 22
 DF SUM OF SG. ANALYSIS OF VARIANCE
 RESIDUAL 22 1272.9221 57.860076
 2718 1716.8722 63.238636
 REGRESSION 22 1272.9221 57.860076
 PTC CUST. STEP NUMBER 22
 WEIGHT STD. PCTN.
 WEIGHT STD. PCTN.
 INDEPENDENT CONTRIBUTION
 SQ. PARTIAL CORRELATION
 VARIABLE VS REST
 SQ. PARTIAL CORRELATION
 INDEPENDENT CONTRIBUTION

REGRESSION PROBLEM S ANALYSIS J1		DEPENDENT	218	60798	9630	STOP = 64
NUMBER OF PREDICTORS		32				TOL = .0010000
FREE PREDICTORS		8Y - 93, 95 - 97, 94, 103 - 105, 112, 114 - 116, 119 - 123, 125 - 126, 128 - 129, 15N, 16I - 162, 163, 16I - 191, 194				
* STEP NUMBER J2 *						
MULTIPLE RSD	STD ERR EST	ENR MEAN SQ.	REG CONST	DF	SUM OF SG.	ANALYSIS OF VARIANCE
*.915510	.772004	*.595990	-1.682122	32	1147.3394	F-RATIO
			REGRESSION	2708	1613.9394	*.0000000
			RESIDUAL			*.59558941
* STEP NUMBER J2 (FINAL) *						
PREDICTOR SYSTEM:	MEAN	STANDARD DEVIATION	STANDARD WEIGHT	REGRESSION WEIGHT	STD. DE* OF REG WT	STD. PARTIAL CORRELATION OF REG WT
VARIABLE						
8B F0003	9.222102	1.4822637	*.089337	*.010119	*.004479	*.372747
90 F0004	1.981394	1.76339	-.060252	*.016755	*.01536	*.004949
91 F0005	5.407040	1.611349	*.07099	*.01164	*.00316	*.00292
92 F0006	4.387450	2.02556	*.067982	*.013622	*.00347	*.001967
93 F0007	*.505303	1.874977	*.061804	*.01467	*.001056	*.721017
95 F0009	*.388544	1.779648	*.077604	*.012777	*.002470	*.002660
96 F0110	5.207046	1.715562	*.840078	*.034952	*.014333	*.553343
97 F0111	5.020064	1.902380	*.082720	*.02195	*.00558	*.640237
98 F0113	5.071507	1.784655	*.044216	*.025083	*.012554	*.00578
99 F0117	*.801450	1.033469	*.01875	*.013478	*.001277	*.005640
101 F0118	*.953631	1.768883	*.117762	*.066795	*.009098	*.001148
105 F0119	*.953667	1.768883	*.117762	*.066795	*.009098	*.001148
112 F0226	3.445524	1.752789	*.025114	*.013755	*.004857	*.631934
114 F0228	1.967719	1.799301	-.027811	*.025104	*.002476	*.001314
115 F0229	1.622130	1.835493	*.04145	*.021945	*.001440	*.661151
116 F0330	1.997710	1.820566	*.14196	*.010042	*.001017	*.000595
117 F0331	1.998844	1.61330	*.01082	*.036359	*.001627	*.649633
119 F0333	1.870986	1.843404	*.061340	*.014496	*.001629	*.251788
120 F0334	1.8401313	1.644922	*.021561	*.010200	*.001003	*.001147
121 F0335	1.533301	1.717949	*.057235	*.039445	*.009114	*.722109
122 F0336	*.708845	1.860671	*.057433	*.020266	*.001040	*.000647
123 F0337	*.942605	1.838950	*.115745	*.031185	*.001262	*.001224
125 F0339	*.520978	2.035554	-.059452	*.027049	*.003398	*.487434
126 F040	5.049887	1.803347	-.037683	*.020919	*.017227	*.775871
128 F042	4.523167	1.840772	*.057482	*.031348	*.015204	*.003118
129 F043	5.065590	1.680472	*.147635	*.081111	*.013894	*.000118
130 F044	1.03189	1.717949	-.046737	*.021819	*.01648	*.601890
131 F045	*.018845	1.862265	*.032032	*.010909	*.00148	*.00065
132 F046	*.013378	1.646022	*.027393	*.014262	*.002175	*.477049
133 F047	*.013278	1.620242	*.027049	*.009398	*.00052	*.001274
134 F048	*.012228	1.184931	*.048618	*.018010	*.002837	*.168072
135 F049	*.012228	1.048022	*.023438	*.013223	*.002837	*.301130
136 F050	*.003378	1.048022	*.034119	*.025607	*.001485	*.000649
137 F051	*.013864	1.184925	*.034119	*.015015	*.001576	*.249434
138 F052	*.001459	*.038175	*.038943	*.024064	*.017102	*.001446
139 F053	*.001459	*.038175	*.038943	*.024064	*.017102	*.001446
140 F054	*.001459	*.038175	*.038943	*.024064	*.017102	*.001446

REGRESSION PROBLEM & ANALYSIS 24														
NUMBER OF PREDICTORS 37					DEPENDENT 249 F0794 V031									
FREE PREDICTORS AY-90, Y4-95, Y4-100-101, Y04-106, Y08-110, Y13-114, Y16-119, Y22-124-125, Y17-127, Y18-128-129, Y19-190, Y194					TOL = .00100000 TOL = .00100000									
<hr/>														
STEP NUMBER 37														
MULTIPLE R ²	STD ERR EST	END MEAN Sq.	REG CONST		DF	SUM OF Sq.	ANALYSIS OF VARIANCE	F-RATIO	PROBABILITY					
*185307	*898447	*897746	*1.401040		REGRESSION	17	49450881	114.475321	.00000000					
VAR 194 F0794	PREDICTOR SYSTEM:	MEAN:	STANDARD DEVIATION:	REGRESSION WEIGHT	RESIDUAL	20/3	2163.3887	*80774445	16.482477					
PREDICTOR VARIABLE														
69 F0403	4.727107	1.0322617	*0.016122	*0.17179	*0.11748		*0.00790		*.364044					
90 F0404	4.981349	1.767334	*0.046125	*0.22939	*0.17614		*0.00495		*.000485					
12 F0406	4.387450	2.029536	*0.054974	*0.26798	*0.18055		*0.01171		*.482110					
94 F0408	4.624454	1.043390	*0.166269	*0.52271	*0.15714		*0.04122		*.0038442					
95 F0409	4.388549	1.796448	*0.061913	*0.49117	*0.14915		*0.02460		*.657887					
97 F0411	5.020064	1.028390	*0.071716	*0.38897	*0.16559		*0.02733		*.674673					
100 F0414	4.993798	1.786777	*0.070414	*0.42123	*0.16077		*0.02466		*.002231					
101 F0415	4.662687	1.58411	*0.056682	*0.49140	*0.12145		*0.06320		*.447332					
109 F0418	4.983347	1.766843	*0.054974	*0.18040	*0.16462		*0.02555		*.001717					
108 F0420	4.648304	1.778192	*0.011043	*0.22076	*0.14979		*0.01429		*.001145					
108 F0422	5.773075	1.057932	*0.04521	*0.22772	*0.17177		*0.00559		*.584549					
110 F0424	5.472862	1.033682	*0.026858	*0.17176	*0.22213		*0.00277		*.008100					
113 F0427	5.110908	1.731758	*0.056447	*0.32362	*0.18794		*0.00277		*.72624					
114 F0428	4.623130	1.015403	*1.114377	*0.63804	*0.16647		*0.01095		*.000913					
116 F0430	4.966886	1.614360	*0.070681	*0.43117	*0.17001		*0.02396		*.681198					
117 F0431	4.391894	1.702261	*0.04975	*0.21990	*0.16798		*0.02453		*.001955					
118 F0432	5.128785	1.162333	*0.052620	*0.37420	*0.1673		*0.02726		*.639101					
119 F0433	4.770886	1.492404	*0.047404	*0.17476	*0.16597		*0.01332		*.535148					
122 F0436	4.708865	1.86671	*0.11663	*0.59373	*0.1792		*0.05125		*.001124					
124 F0438	5.006202	1.375702	*0.076041	*0.4298	*0.16411		*0.02042		*.410855					
125 F0439	4.520944	1.039556	*0.035330	*0.17235	*0.10573		*0.00982		*.711914					
127 F0441	5.101779	1.715933	*0.08720	*0.85747	*0.16131		*0.02077		*.364042					
129 F0443	5.088588	1.682047	*0.042193	*0.20133	*0.16464		*0.00950		*.640453					
138 F0732	*0.02189	*0.06737	*0.17454	*0.92856	*0.1673		*0.00770		*.001980					
140 F0734	*0.08887	*0.15632	*0.09432	*0.59856	*0.1715		*0.01154		*.003352					
161 F0735	*0.15688	*1.24265	*0.07414	*0.371795	*0.15966		*0.02248		*.001837					
163 F0737	*0.18242	*1.34823	*0.12436	*0.313725	*0.157483		*0.01195		*.332070					
164 F0738	*0.033283	*0.057208	*0.036916	*0.632424	*0.320388		*0.01152		*.154958					
165 F0739	*0.09013	*0.63223	*0.093367	*0.758874	*0.311290		*0.01152		*.320115					
174 F0749	*0.08971	*1.34273	*0.05053	*0.99246	*0.15533		*0.0295		*.454032					
174 F0752	*0.02554	*0.04972	*0.04764	*0.563194	*0.16100		*0.00776		*.447184					
179 F0753	*0.04013	*1.63223	*0.08061	*0.325310	*0.16154		*0.00410		*.003359					
182 F0756	*0.19422	*1.16431	*0.05424	*0.62283	*0.182100		*0.02386		*.180495					
184 F0758	*0.04374	*0.66722	*0.02121	*0.40495	*0.29968		*0.00722		*.332070					
187 F0761	*0.01624	*1.642673	*0.06724	*0.949427	*0.16126		*0.001165		*.201165					
190 F0764	*0.09551	*1.693345	*0.02740	*0.61500	*1.35683		*0.01132		*.200139					
194 F0766	*0.01149	*0.381795	*0.05477	*0.171430	*0.48542		*0.00452		*.000887					
							*0.00044							

REGRESSION PROBLEM 7 ANALYSIS 23									
DEPENDENT		420		FOBUD		V832		STOP = .72	
NUMBER OF PREDICTORS		36						TOL = .00100000	
FREE PREDICTORS		89, 91- 94, 96, 99-100, 103-105, 107-109-111, 113, 115-116, 118, 120-124, 126, 129, 157, 174, 179-180, 182, 190-							
STEP NUMBER		36							
1	MULTIPLE R ²	.2652274	SID ER EST	.0225224	ER MEAN SQ.	REG CONST	DF	SUM OF Sq. ANALYSIS OF VARIANCE	F-RATIO
2	VAR = 111	FO425				*1.079345	36	830.86816	23.076671
3	PREDICTOR SYSTEM:				STANDARD	REGRESSION	2704	2301.2409	.19925482-0.3
4	PREDICTOR VARIABLE		MEAN	STANDARD	WEIGHT	REGRESSION WEIGHT		SQ. PARTIAL CORRELATION	INDEPENDENT VARIABLE VS REST
5	89 FO403	9.227107	1.432337	-0.050814	-0.028695	*0.12094	*0.02217	.3677667	*0.01632
6	91 FO405	5.009704	1.411349	0.064604	0.026949	*0.16109	*0.02517	.550286	*0.01854
7	92 FO406	4.9887450	2.029556	0.055887	0.026949	*0.13156	*0.01639	.548183	*0.01534
8	93 FO407	3.5501930	1.074477	0.07955	*0.27352	*0.16418	*0.01625	.622005	*0.01754
9	94 FO408	4.624754	1.668380	*0.043804	*0.24774	*0.14560	*0.01450	.596518	*0.00790
10	95 FO409	5.071507	1.155632	*0.054851	*0.027299	*0.16756	*0.00955	.6337648	*0.00703
11	96 FO410	5.0203048	1.49555	-0.075975	*0.033139	*0.16501	*0.01489	.635735	*0.01096
12	97 FO411	9.193798	1.786777	*0.06374	*0.28779	*0.16499	*0.01056	.65720	*0.00776
13	98 FO412	9.053631	1.744683	*0.07221	*0.08332	*0.16094	*0.00994	.628106	*0.02886
14	99 FO413	9.053667	1.755769	-0.09844	*0.07286	*0.16621	*0.00793	.6398616	*0.05875
15	100 FO414	3.065524	1.555769	-0.058958	*0.14970	*0.16005	*0.007425	.629111	*0.007425
16	101 FO415	3.021211	1.532772	-0.073188	*0.14528	*0.16050	*0.00511	.6345508	*0.03508
17	102 FO416	3.021211	1.532772	-0.054049	*0.133494	*0.18311	*0.01235	.689107	*0.00908
18	103 FO417	5.071507	1.333492	0.061145	*0.02018	*0.19281	*0.01527	.694510	*0.01123
19	104 FO418	5.0715205	1.738698	-0.04193	*0.02166	*0.19226	*0.00687	.741272	*0.00565
20	105 FO419	5.1101008	1.731758	*0.060701	*0.31976	*0.17245	*0.01100	.720583	*0.00110
21	106 FO420	5.094710	1.620566	*0.154451	*0.070704	*0.19282	*0.008118	.747933	*0.00613
22	107 FO421	5.094710	1.61430	*0.099668	*0.06008	*0.16184	*0.005666	.577005	*0.004202
23	108 FO422	5.094710	1.61430	-0.027349	*0.02330	*0.15191	*0.00846	.549706	*0.00493
24	109 FO423	4.624754	1.256968	-0.054049	*0.133494	*0.18311	*0.01235	.689107	*0.00908
25	110 FO424	5.071507	1.333492	0.061145	*0.02018	*0.19281	*0.01527	.694510	*0.01123
26	111 FO425	5.0715205	1.738698	-0.04193	*0.02166	*0.19226	*0.00687	.741272	*0.00565
27	112 FO426	5.1101008	1.731758	*0.060701	*0.31976	*0.17245	*0.01100	.720583	*0.00110
28	113 FO427	5.1101008	1.731758	*0.154451	*0.070704	*0.19282	*0.008118	.747933	*0.00613
29	114 FO428	5.094710	1.620566	*0.099668	*0.06008	*0.16184	*0.005666	.577005	*0.004202
30	115 FO429	5.094710	1.61430	-0.027349	*0.02330	*0.15191	*0.00846	.549706	*0.00493
31	116 FO430	5.094710	1.61430	-0.054049	*0.133494	*0.18311	*0.01235	.689107	*0.00908
32	117 FO431	5.094710	1.61430	-0.061145	*0.02018	*0.19281	*0.01527	.694510	*0.01123
33	118 FO432	5.094710	1.61430	-0.04193	*0.02166	*0.19226	*0.00687	.741272	*0.00565
34	119 FO433	5.094710	1.61430	-0.154451	*0.070704	*0.19282	*0.008118	.747933	*0.00613
35	120 FO434	5.094710	1.61430	-0.027349	*0.02330	*0.15191	*0.00846	.577005	*0.004202
36	121 FO435	5.094710	1.61430	-0.061145	*0.02018	*0.19281	*0.01527	.694510	*0.01123
37	122 FO436	4.7088465	1.606071	-0.083608	*0.040542	*0.15746	*0.034272	.639010	*0.022302
38	123 FO437	4.7088465	1.606071	-0.084517	*0.050101	*0.17064	*0.03202	.674957	*0.00988
39	124 FO438	5.0626025	1.3737502	*0.077567	*0.047731	*0.19282	*0.02134	.736911	*0.01571
40	125 FO439	5.0626025	1.408367	-1.115574	*0.08331	*0.19312	*0.045552	.74849	*0.033340
41	126 FO440	5.0626025	1.408367	-0.026395	*0.02330	*0.15191	*0.00846	.549706	*0.00493
42	127 FO441	5.0626025	1.408367	-0.061145	*0.02018	*0.19281	*0.01527	.689107	*0.00908
43	128 FO442	5.0626025	1.408367	-0.04193	*0.02166	*0.19226	*0.00687	.741272	*0.00565
44	129 FO443	5.0626025	1.408367	-0.154451	*0.070704	*0.19282	*0.008118	.747933	*0.00613
45	130 FO444	5.0626025	1.408367	-0.027349	*0.02330	*0.15191	*0.00846	.577005	*0.004202
46	131 FO445	5.0626025	1.408367	-0.061145	*0.02018	*0.19281	*0.01527	.694510	*0.01123
47	132 FO446	5.0626025	1.408367	-0.04193	*0.02166	*0.19226	*0.00687	.741272	*0.00565
48	133 FO447	5.0626025	1.408367	-0.154451	*0.070704	*0.19282	*0.008118	.747933	*0.00613
49	134 FO448	5.0626025	1.408367	-0.027349	*0.02330	*0.15191	*0.00846	.577005	*0.004202
50	135 FO449	5.0626025	1.408367	-0.061145	*0.02018	*0.19281	*0.01527	.694510	*0.01123
51	136 FO450	5.0626025	1.408367	-0.04193	*0.02166	*0.19226	*0.00687	.741272	*0.00565
52	137 FO451	5.0626025	1.408367	-0.154451	*0.070704	*0.19282	*0.008118	.747933	*0.00613
53	138 FO452	5.0626025	1.408367	-0.027349	*0.02330	*0.15191	*0.00846	.577005	*0.004202
54	139 FO453	5.0626025	1.408367	-0.061145	*0.02018	*0.19281	*0.01527	.694510	*0.01123
55	140 FO454	5.0626025	1.408367	-0.04193	*0.02166	*0.19226	*0.00687	.741272	*0.00565
56	141 FO455	5.0626025	1.408367	-0.154451	*0.070704	*0.19282	*0.008118	.747933	*0.00613
57	142 FO456	5.0626025	1.408367	-0.027349	*0.02330	*0.15191	*0.00846	.577005	*0.004202
58	143 FO457	5.0626025	1.408367	-0.061145	*0.02018	*0.19281	*0.01527	.694510	*0.01123
59	144 FO458	5.0626025	1.408367	-0.04193	*0.02166	*0.19226	*0.00687	.741272	*0.00565
60	145 FO459	5.0626025	1.408367	-0.154451	*0.070704	*0.19282	*0.008118	.747933	*0.00613
61	146 FO460	5.0626025	1.408367	-0.027349	*0.02330	*0.15191	*0.00846	.577005	*0.004202
62	147 FO461	5.0626025	1.408367	-0.061145	*0.02018	*0.19281	*0.01527	.694510	*0.01123
63	148 FO462	5.0626025	1.408367	-0.04193	*0.02166	*0.19226	*0.00687	.741272	*0.00565
64	149 FO463	5.0626025	1.408367	-0.154451	*0.070704	*0.19282	*0.008118	.747933	*0.00613
65	150 FO464	5.0626025	1.408367	-0.027349	*0.02330	*0.15191	*0.00846	.577005	*0.004202
66	151 FO465	5.0626025	1.408367	-0.061145	*0.02018	*0.19281	*0.01527	.694510	*0.01123
67	152 FO466	5.0626025	1.408367	-0.04193	*0.02166	*0.19226	*0.00687	.741272	*0.00565
68	153 FO467	5.0626025	1.408367	-0.154451	*0.070704	*0.19282	*0.008118	.747933	*0.00613
69	154 FO468	5.0626025	1.408367	-0.027349	*0.02330	*0.15191	*0.00846	.577005	*0.004202
70	155 FO469	5.0626025	1.408367	-0.061145	*0.02018	*0.19281	*0.01527	.694510	*0.01123
71	156 FO470	5.0626025	1.408367	-0.04193	*0.02166	*0.19226	*0.00687	.741272	*0.00565
72	157 FO471	5.0626025	1.408367	-0.154451	*0.070704	*0.19282	*0.008118	.747933	*0.00613
73	158 FO472	5.0626025	1.408367	-0.027349	*0.02330	*0.15191	*0.00846	.577005	*0.004202
74	159 FO473	5.0626025	1.408367	-0.061145	*0.02018	*0.19281	*0.01527	.694510	*0.01123
75	160 FO474	5.0626025	1.408367	-0.04193	*0.02166	*0.19226	*0.00687	.741272	*0.00565
76	161 FO475	5.0626025	1.408367	-0.154451	*0.070704	*0.19282	*0.008118	.747933	*0.00613
77	162 FO476	5.0626025	1.408367	-0.027349	*0.02330	*0.15191	*0.00846	.577005	*0.004202
78	163 FO477	5.0626025	1.408367	-0.061145	*0.02018	*0.19281	*0.01527	.694510	*0.01123
79	164 FO478	5.0626025	1.408367	-0.04193	*0.02166	*0.19226	*0.00687	.741272	*0.00565
80	165 FO479	5.0626025	1.408367	-0.154451	*0.070704	*0.19282	*0.008118	.747933	*0.00613
81	166 FO480	5.0626025	1.408367	-0.027349	*0.02330	*0.15191	*0.00846	.577005	*0.004202
82	167 FO481	5.0626025	1.408367	-0.061145	*0.02018	*0.19281	*0.01527	.694510	*0.01123
83	168 FO482	5.0626025	1.408367	-0.04193	*0.02166	*0.19226	*0.00687	.741272	*0.00565
84	169 FO483	5.0626025	1.408367	-0.154451	*0.070704	*0.19282	*0.008118	.747933	*0.00613
85	170 FO484	5.0626025	1.4083						

REGRESSION PROBLEM 8 ANALYSIS 24
DEPENDENT 221 FIBOL V833
NUMBER OF PREDICTORS 3/
FREE PREDICTORS 91-93, 96-97, 101, 103, 107-108, 112, 114-117, 119-121, 124, 126, 128, 158, 161, 164, 171-173, 177, 179-180, 182,
(93-194)

STEP NUMBER 32									
					ANALYSIS OF VARIANCE				
MULTIPLE R ²	STD ERR EST	EMN MEAN Sq.	REG CONST	DF	SUM OF SQ.	MEAN Sq.	F-RATIO	PROBABILITY	
.300435	.819128	.772866	-2.346504	32	898.82605	28.088314	36.343094	.00000000	
VAR = 158 F0732			REGRESSION RESIDUAL	2708	2072.8222	7.72266440			
PREDICTOR SYSTEM:	MEAN	STANDARD DEVIATION	REGRESSION WEIGHT	STD. DEV. OF REG WT	SD. PARTIAL CORRELATION	SD. CORRELATION VARIABLE VS REST	INDEPENDENT CONTRIBUTION		
VARIABLE									
91 F0405	5.409704	1.611349	*192504	*015317	*023642	*534943	.017140		
92 F0406	4.317451	2.019566	*019450	*012573	*00284	*01531			
93 F0407	4.509303	1.614417	*019381	*012334	*00363	*01531			
96 F0410	5.209048	1.715562	*123452	*015437	*016448	*01531			
97 F0411	5.002066	*102380	*012751	*023482	*011015	*010136	.00725		
101 F0415	4.6202897	1.684131	*075411	*047743	*012312	*005912			
103 F0417	4.503831	1.001450	*01970	*01970	*010583	*01185			
107 F0421	3.135717	1.837772	*05604	*032705	*010930	*DD3197			
108 F0422	5.773075	1.557794	*041326	*02716	*015683	*000807			
112 F0428	4.987119	1.955801	*000584	*01289	*01152	*01531			
114 F0428	4.631310	1.4315403	*000164	*03426	*011213	*01531			
115 F0429	4.420566	*014152	*02045	*016470	*001111	*01531			
116 F0430	4.966866	1.014360	*075837	*049687	*016357	*003153			
117 F0431	4.318186	*102267	*038467	*02736	*016900	*00126			
119 F0433	4.770866	1.092404	*046018	*029410	*010508	*001050			
120 F0434	5.401313	1.949492	*07704	*049361	*01104	*000734			
121 F0435	4.536301	1.21794	*066416	*005119	*01225	*001070			
124 F0438	5.068202	1.737502	*059156	*035557	*019443	*001929			
126 F0440	5.048887	1.008347	*084607	*047004	*017724	*001911			
129 F0443	5.088584	1.682047	*166328	*103327	*016268	*014979			
158 F0732	*002169	*466737	*020400	*46053	*472635	*000357			
161 F0735	*015688	*124265	*161086	*513463	*103311	*003777			
164 F0736	*003283	*057208	*057224	*053328	*330985	*003133			
171 F0745	*002169	*146237	*032721	*731763	*56109	*000621			
172 F0746	*022919	*053947	*048275	*900115	*363110	*000550			
173 F0747	*051713	*156651	*011418	*176275	*176275	*00215			
177 F0751	*006932	*082969	*029589	*372644	*218681	*010171			
179 F0753	*004013	*063223	*019369	*615961	*317450	*002134			
180 F0754	*005837	*076179	*039848	*545682	*27780	*011338			
182 F0756	*049226	*118431	*07735	*24065	*167582	*000552			
183 F0767	*09701	*138910	*042642	*320030	*12893	*002146			
184 F0768	*001459	*038175	*053267	*458045	*60978	*002112			

STEP NUMBER 32 (FINAL)

REGRESSION PROGRAM - ANALYSIS OF VARIANCE
NUMBER OF PREDICTORS 27-31 + 30-34 + 35-39 + 40-43 + 44-47 + 48-51 + 52-55 + 56-59 + 60-63 + 64-67 + 68-70 + 71-74 + 75-78 + 79-81 + 82-85

Step Number	Std Err Est	Sum of Squares	Mean Square	F Ratio	Probabilty
1	56.1776	665.53	44.5517	11.4594	.000349
2	4.0404	96.97	9.6541	2.4190	.051005
3	1.0211	20.5032	6.8340	1.6417	.051005
4	0.9215	19.8103	6.2700	1.4616	.051005
5	0.6217	17.9613	3.5923	0.8945	.051005
6	0.5174	16.6693	2.7781	0.6934	.051005
7	0.5174	15.9368	2.2123	0.5534	.051005
8	0.4807	15.7767	1.9441	0.4884	.051005
9	0.2221	4.94152	1.2353	0.3084	.051005
10	0.2221	4.94121	1.2350	0.3082	.051005
11	0.2221	4.94102	1.2347	0.3079	.051005
12	0.2221	4.94082	1.2344	0.3076	.051005
13	0.2221	4.94062	1.2341	0.3073	.051005
14	0.2221	4.94042	1.2338	0.3070	.051005
15	0.2221	4.94022	1.2335	0.3067	.051005
16	0.2221	4.94002	1.2332	0.3064	.051005
17	0.2221	4.93982	1.2329	0.3061	.051005
18	0.2221	4.93962	1.2326	0.3058	.051005
19	0.2221	4.93942	1.2323	0.3055	.051005
20	0.2221	4.93922	1.2320	0.3052	.051005
21	0.2221	4.93902	1.2317	0.3049	.051005
22	0.2221	4.93882	1.2314	0.3046	.051005
23	0.2221	4.93862	1.2311	0.3043	.051005
24	0.2221	4.93842	1.2308	0.3040	.051005
25	0.2221	4.93822	1.2305	0.3037	.051005
26	0.2221	4.93802	1.2302	0.3034	.051005
27	0.2221	4.93782	1.2300	0.3031	.051005
28	0.2221	4.93762	1.2297	0.3028	.051005
29	0.2221	4.93742	1.2294	0.3025	.051005
30	0.2221	4.93722	1.2291	0.3022	.051005
31	0.2221	4.93702	1.2288	0.3019	.051005
32	0.2221	4.93682	1.2285	0.3016	.051005
33	0.2221	4.93662	1.2282	0.3013	.051005
34	0.2221	4.93642	1.2279	0.3010	.051005
35	0.2221	4.93622	1.2276	0.3007	.051005
36	0.2221	4.93602	1.2273	0.3004	.051005
37	0.2221	4.93582	1.2270	0.3001	.051005
38	0.2221	4.93562	1.2267	0.2998	.051005
39	0.2221	4.93542	1.2264	0.2995	.051005
40	0.2221	4.93522	1.2261	0.2992	.051005
41	0.2221	4.93502	1.2258	0.2989	.051005
42	0.2221	4.93482	1.2255	0.2986	.051005
43	0.2221	4.93462	1.2252	0.2983	.051005
44	0.2221	4.93442	1.2249	0.2980	.051005
45	0.2221	4.93422	1.2246	0.2977	.051005
46	0.2221	4.93402	1.2243	0.2974	.051005
47	0.2221	4.93382	1.2240	0.2971	.051005
48	0.2221	4.93362	1.2237	0.2968	.051005
49	0.2221	4.93342	1.2234	0.2965	.051005
50	0.2221	4.93322	1.2231	0.2962	.051005
51	0.2221	4.93302	1.2228	0.2959	.051005
52	0.2221	4.93282	1.2225	0.2956	.051005
53	0.2221	4.93262	1.2222	0.2953	.051005
54	0.2221	4.93242	1.2219	0.2950	.051005
55	0.2221	4.93222	1.2216	0.2947	.051005
56	0.2221	4.93202	1.2213	0.2944	.051005
57	0.2221	4.93182	1.2210	0.2941	.051005
58	0.2221	4.93162	1.2207	0.2938	.051005
59	0.2221	4.93142	1.2204	0.2935	.051005
60	0.2221	4.93122	1.2201	0.2932	.051005
61	0.2221	4.93102	1.2198	0.2929	.051005
62	0.2221	4.93082	1.2195	0.2926	.051005
63	0.2221	4.93062	1.2192	0.2923	.051005
64	0.2221	4.93042	1.2189	0.2920	.051005
65	0.2221	4.93022	1.2186	0.2917	.051005
66	0.2221	4.93002	1.2183	0.2914	.051005
67	0.2221	4.92982	1.2180	0.2911	.051005
68	0.2221	4.92962	1.2177	0.2908	.051005
69	0.2221	4.92942	1.2174	0.2905	.051005
70	0.2221	4.92922	1.2171	0.2902	.051005
71	0.2221	4.92902	1.2168	0.2899	.051005
72	0.2221	4.92882	1.2165	0.2896	.051005
73	0.2221	4.92862	1.2162	0.2893	.051005
74	0.2221	4.92842	1.2159	0.2890	.051005
75	0.2221	4.92822	1.2156	0.2887	.051005
76	0.2221	4.92802	1.2153	0.2884	.051005
77	0.2221	4.92782	1.2150	0.2881	.051005
78	0.2221	4.92762	1.2147	0.2878	.051005
79	0.2221	4.92742	1.2144	0.2875	.051005
80	0.2221	4.92722	1.2141	0.2872	.051005
81	0.2221	4.92702	1.2138	0.2869	.051005
82	0.2221	4.92682	1.2135	0.2866	.051005
83	0.2221	4.92662	1.2132	0.2863	.051005
84	0.2221	4.92642	1.2129	0.2860	.051005
85	0.2221	4.92622	1.2126	0.2857	.051005
86	0.2221	4.92602	1.2123	0.2854	.051005
87	0.2221	4.92582	1.2120	0.2851	.051005
88	0.2221	4.92562	1.2117	0.2848	.051005
89	0.2221	4.92542	1.2114	0.2845	.051005
90	0.2221	4.92522	1.2111	0.2842	.051005
91	0.2221	4.92502	1.2108	0.2839	.051005
92	0.2221	4.92482	1.2105	0.2836	.051005
93	0.2221	4.92462	1.2102	0.2833	.051005
94	0.2221	4.92442	1.2099	0.2830	.051005
95	0.2221	4.92422	1.2096	0.2827	.051005
96	0.2221	4.92402	1.2093	0.2824	.051005
97	0.2221	4.92382	1.2090	0.2821	.051005
98	0.2221	4.92362	1.2087	0.2818	.051005
99	0.2221	4.92342	1.2084	0.2815	.051005
100	0.2221	4.92322	1.2081	0.2812	.051005
101	0.2221	4.92302	1.2078	0.2809	.051005
102	0.2221	4.92282	1.2075	0.2806	.051005
103	0.2221	4.92262	1.2072	0.2803	.051005
104	0.2221	4.92242	1.2069	0.2800	.051005
105	0.2221	4.92222	1.2066	0.2797	.051005
106	0.2221	4.92202	1.2063	0.2794	.051005
107	0.2221	4.92182	1.2060	0.2791	.051005
108	0.2221	4.92162	1.2057	0.2788	.051005
109	0.2221	4.92142	1.2054	0.2785	.051005
110	0.2221	4.92122	1.2051	0.2782	.051005
111	0.2221	4.92102	1.2048	0.2779	.051005
112	0.2221	4.92082	1.2045	0.2776	.051005
113	0.2221	4.92062	1.2042	0.2773	.051005
114	0.2221	4.92042	1.2039	0.2770	.051005
115	0.2221	4.92022	1.2036	0.2767	.051005
116	0.2221	4.92002	1.2033	0.2764	.051005
117	0.2221	4.91982	1.2030	0.2761	.051005
118	0.2221	4.91962	1.2027	0.2758	.051005
119	0.2221	4.91942	1.2024	0.2755	.051005
120	0.2221	4.91922	1.2021	0.2752	.051005
121	0.2221	4.91902	1.2018	0.2749	.051005
122	0.2221	4.91882	1.2015	0.2746	.051005
123	0.2221	4.91862	1.2012	0.2743	.051005
124	0.2221	4.91842	1.2009	0.2740	.051005
125	0.2221	4.91822	1.2006	0.2737	.051005
126	0.2221	4.91802	1.2003	0.2734	.051005
127	0.2221	4.91782	1.2000	0.2731	.051005
128	0.2221	4.91762	1.1997	0.2728	.051005
129	0.2221	4.91742	1.1994	0.2725	.051005
130	0.2221	4.91722	1.1991	0.2722	.051005
131	0.2221	4.91702	1.1988	0.2719	.051005
132	0.2221	4.91682	1.1985	0.2716	.051005
133	0.2221	4.91662	1.1982	0.2713	.051005
134	0.2221	4.91642	1.1979	0.2710	.051005
135	0.2221	4.91622	1.1976	0.2707	.051005
136	0.2221	4.91602	1.1973	0.2704	.051005
137	0.2221	4.91582	1.1970	0.2701	.051005
138	0.2221	4.91562	1.1967	0.2698	.051005
139	0.2221	4.91542	1.1964	0.2695	.051005
140	0.2221	4.91522	1.1961	0.2692	.051005
141	0.2221	4.91502	1.1958	0.2689	.051005
142	0.2221	4.91482	1.1955	0.2686	.051005
143	0.2221	4.91462	1.1952	0.2683	.051005
144	0.2221	4.91442	1.1949	0.2680	.051005
145	0.2221	4.91422	1.1946	0.2677	.051005
146	0.2221	4.91402	1.1943	0.2674	.051005
147	0.2221	4.91382	1.1940	0.2671	.051005
148	0.2221	4.91362	1.1937	0.2668	.051005
149	0.2221	4.91342	1.1934	0.2665	.051005
150	0.2221	4.91322	1.1931	0.2662	.051005
151	0.2221	4.91302	1.1928	0.2659	.051005
152	0.2221	4.91282	1.1925	0.2656	.051005
153	0.2221	4.91262	1.1922	0.2653	.051005
154	0.2221	4.91242	1.1919	0.2650	.051005
155	0.2221	4.91222	1.1916	0.2647	.051005
156	0.2221	4.91202	1.1913	0.2644	.051005
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REGRESSION PROBLEM 10 ANALYSIS 46																	
NUMBER OF PREDICTORS 54		MULTIPLE R ²		STD ERR EST		EST MEAN SIG.		MEAN JUDGE									
FREE PREDICTORS 25, 26, 31, 34, 36, 41, 43, 48, 49, 53, 56, 62, 63, 66, 73, 75, 77, 81, 90, 94-102, 104,		1.17-1.18, 1.10, 1.12-1.14, 1.16-1.18, 1.22-1.24-1.25, 1.27-1.28, 1.60-1.61, 1.63-1.64-1.74, 1.90-1.94		1.09675		-0.03771		-0.095675									
STEP ALMUTH 54																	
ANALYSIS OF VARIANCE																	
PRODUCTION SYSTEM:		STANDARD		STANDARD		STANDARD		SIG. CORRELATION									
VARIABLE		DEVIATION		DEVIATION		DEVIATION		VARIABLE VS REST									
25 FU202	5.0972045	1.9227748	-0.01195	-0.12611	-0.12274	-0.12274	-0.01196	-0.26793	*0.0183								
26 FU205	5.4536241	0.5363241	-0.01163	-0.12611	-0.12274	-0.12274	-0.01153	-0.35234	*0.0167								
27 FU206	3.4481641	1.7385458	-0.05139	-0.13029	-0.12757	-0.13029	-0.01467	-0.00401	*0.0148								
28 FU207	4.9232021	1.5611751	-0.01193	-0.11875	-0.11707	-0.11875	-0.01261	-0.27615	*0.02504								
29 FU208	5.7167628	1.6391150	-0.01153	-0.11615	-0.11464	-0.11615	-0.01146	-0.19908	*0.03148								
30 FU209	5.2075035	1.9385205	-0.01150	-0.13623	-0.12310	-0.13623	-0.01104	-0.04958	*0.01748								
31 FU210	5.1768743	1.7076202	-0.01160	-0.16456	-0.15755	-0.16456	-0.01104	-0.22370	*0.02171								
32 FU211	5.0187613	1.6411114	-0.01144	-0.16216	-0.15262	-0.16216	-0.01104	-0.13532	*0.03432								
33 FU212	3.6659613	1.9296282	-0.03772	-0.08585	-0.08144	-0.08585	-0.04906	-0.04906	*0.02998								
34 FU213	2.9612367	0.9407070	-0.06707	-0.06466	-0.06497	-0.06466	-0.01176	-0.10489	*0.02519								
35 FU214	4.1123646	1.6404743	-0.01153	-0.12167	-0.11545	-0.12167	-0.01157	-0.16056	*0.02095								
36 FU215	4.1123646	1.6409026	-0.01153	-0.12174	-0.11545	-0.12174	-0.01157	-0.15036	*0.02096								
37 FU216	5.2674742	1.4970734	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.13520	*0.02703								
38 FU217	5.1678674	1.3818549	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.12570	*0.02686								
39 FU218	5.0402773	1.5443972	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.13364	*0.02817								
40 FU219	5.1914955	1.6098747	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.11939	*0.03161								
41 FU220	5.0204700	0.5859151	-0.01150	-0.12174	-0.11545	-0.12174	-0.01157	-0.04970	*0.02078								
42 FU221	5.6070744	1.9419742	-0.01150	-0.12174	-0.11545	-0.12174	-0.01157	-0.15176	*0.02096								
43 FU222	6.0621234	1.7251056	-0.01150	-0.12174	-0.11545	-0.12174	-0.01157	-0.15036	*0.02096								
44 FU223	5.0230	5.2674742	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.13520	*0.02703								
45 FU224	5.1678674	1.3818549	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.12570	*0.02686								
46 FU225	5.0402773	1.5443972	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.13364	*0.02817								
47 FU226	5.1914955	1.6098747	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.11939	*0.03161								
48 FU227	5.0204700	0.5859151	-0.01150	-0.12174	-0.11545	-0.12174	-0.01157	-0.04970	*0.02078								
49 FU228	5.6070744	1.7251056	-0.01150	-0.12174	-0.11545	-0.12174	-0.01157	-0.15176	*0.02096								
50 FU229	6.0621234	1.7251056	-0.01150	-0.12174	-0.11545	-0.12174	-0.01157	-0.15036	*0.02096								
51 FU230	5.0230	5.2674742	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.13520	*0.02703								
52 FU231	5.1678674	1.3818549	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.12570	*0.02686								
53 FU232	5.0402773	1.5443972	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.13364	*0.02817								
54 FU233	5.1914955	1.6098747	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.11939	*0.03161								
55 FU234	5.0204700	0.5859151	-0.01150	-0.12174	-0.11545	-0.12174	-0.01157	-0.04970	*0.02078								
56 FU235	5.6070744	1.7251056	-0.01150	-0.12174	-0.11545	-0.12174	-0.01157	-0.15176	*0.02096								
57 FU236	6.0621234	1.7251056	-0.01150	-0.12174	-0.11545	-0.12174	-0.01157	-0.15036	*0.02096								
58 FU237	5.0230	5.2674742	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.13520	*0.02703								
59 FU238	5.1678674	1.3818549	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.12570	*0.02686								
60 FU239	5.0402773	1.5443972	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.13364	*0.02817								
61 FU240	5.1914955	1.6098747	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.11939	*0.03161								
62 FU241	5.0204700	0.5859151	-0.01150	-0.12174	-0.11545	-0.12174	-0.01157	-0.04970	*0.02078								
63 FU242	5.6070744	1.7251056	-0.01150	-0.12174	-0.11545	-0.12174	-0.01157	-0.15176	*0.02096								
64 FU243	6.0621234	1.7251056	-0.01150	-0.12174	-0.11545	-0.12174	-0.01157	-0.15036	*0.02096								
65 FU244	5.0230	5.2674742	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.13520	*0.02703								
66 FU245	5.1678674	1.3818549	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.12570	*0.02686								
67 FU246	5.0402773	1.5443972	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.13364	*0.02817								
68 FU247	5.1914955	1.6098747	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.11939	*0.03161								
69 FU248	5.0204700	0.5859151	-0.01150	-0.12174	-0.11545	-0.12174	-0.01157	-0.04970	*0.02078								
70 FU249	5.6070744	1.7251056	-0.01150	-0.12174	-0.11545	-0.12174	-0.01157	-0.15176	*0.02096								
71 FU250	6.0621234	1.7251056	-0.01150	-0.12174	-0.11545	-0.12174	-0.01157	-0.15036	*0.02096								
72 FU251	5.0230	5.2674742	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.13520	*0.02703								
73 FU252	5.1678674	1.3818549	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.12570	*0.02686								
74 FU253	5.0402773	1.5443972	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.13364	*0.02817								
75 FU254	5.1914955	1.6098747	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.11939	*0.03161								
76 FU255	5.0204700	0.5859151	-0.01150	-0.12174	-0.11545	-0.12174	-0.01157	-0.04970	*0.02078								
77 FU256	5.6070744	1.7251056	-0.01150	-0.12174	-0.11545	-0.12174	-0.01157	-0.15176	*0.02096								
78 FU257	6.0621234	1.7251056	-0.01150	-0.12174	-0.11545	-0.12174	-0.01157	-0.15036	*0.02096								
79 FU258	5.0230	5.2674742	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.13520	*0.02703								
80 FU259	5.1678674	1.3818549	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.12570	*0.02686								
81 FU260	5.0402773	1.5443972	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.13364	*0.02817								
82 FU261	5.1914955	1.6098747	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.11939	*0.03161								
83 FU262	5.0204700	0.5859151	-0.01150	-0.12174	-0.11545	-0.12174	-0.01157	-0.04970	*0.02078								
84 FU263	5.6070744	1.7251056	-0.01150	-0.12174	-0.11545	-0.12174	-0.01157	-0.15176	*0.02096								
85 FU264	6.0621234	1.7251056	-0.01150	-0.12174	-0.11545	-0.12174	-0.01157	-0.15036	*0.02096								
86 FU265	5.0230	5.2674742	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.13520	*0.02703								
87 FU266	5.1678674	1.3818549	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.12570	*0.02686								
88 FU267	5.0402773	1.5443972	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.13364	*0.02817								
89 FU268	5.1914955	1.6098747	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.11939	*0.03161								
90 FU269	5.0204700	0.5859151	-0.01150	-0.12174	-0.11545	-0.12174	-0.01157	-0.04970	*0.02078								
91 FU270	5.6070744	1.7251056	-0.01150	-0.12174	-0.11545	-0.12174	-0.01157	-0.15176	*0.02096								
92 FU271	6.0621234	1.7251056	-0.01150	-0.12174	-0.11545	-0.12174	-0.01157	-0.15036	*0.02096								
93 FU272	5.0230	5.2674742	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.13520	*0.02703								
94 FU273	5.1678674	1.3818549	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.12570	*0.02686								
95 FU274	5.0402773	1.5443972	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.13364	*0.02817								
96 FU275	5.1914955	1.6098747	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.11939	*0.03161								
97 FU276	5.0204700	0.5859151	-0.01150	-0.12174	-0.11545	-0.12174	-0.01157	-0.04970	*0.02078								
98 FU277	5.6070744	1.7251056	-0.01150	-0.12174	-0.11545	-0.12174	-0.01157	-0.15176	*0.02096								
99 FU278	6.0621234	1.7251056	-0.01150	-0.12174	-0.11545	-0.12174	-0.01157	-0.15036	*0.02096								
100 FU279	5.0230	5.2674742	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.13520	*0.02703								
101 FU280	5.1678674	1.3818549	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.12570	*0.02686								
102 FU281	5.0402773	1.5443972	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.13364	*0.02817								
103 FU282	5.1914955	1.6098747	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.11939	*0.03161								
104 FU283	5.0204700	0.5859151	-0.01150	-0.12174	-0.11545	-0.12174	-0.01157	-0.04970	*0.02078								
105 FU284	5.6070744	1.7251056	-0.01150	-0.12174	-0.11545	-0.12174	-0.01157	-0.15176	*0.02096								
106 FU285	6.0621234	1.7251056	-0.01150	-0.12174	-0.11545	-0.12174	-0.01157	-0.15036	*0.02096								
107 FU286	5.0230	5.2674742	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.13520	*0.02703								
108 FU287	5.1678674	1.3818549	-0.01151	-0.12174	-0.11545	-0.12174	-0.01157	-0.12570	*0.02686								
109 FU288	5.0402773	1.5443972	-0.01151	-0.12174	-0												

REGRESSION PROBLEM 11 ANALYSIS									
NUMBER OF PREDICTORS					FNUUU V032				
PREDICTORS 21 - 24, 31, 35 - 3n, 4n, 43 - 46, 48 - 52, 55 - 57, 60 - 67, 70, 71, 74, 90, 95 - 96, 97, 100, 102 - 105, 108 - 111, 116 - 117, 120 - 121, 124 - 126, 128 - 130, 134 - 160, 135 - 186					TOL = .00100000				
- STEP NUMBER 52 -									
MULTIPLE R ²	STD ERM EST	ERM MEAN	REG CONST	DF	SUM OF SQU.	MEAN SQU.	F-RATIO	PROBABILITY	
.546777	.72670n	.726105	-2.08808	52	1712.636	32.93920	62.36293	.0000000	
VAR = 9n F0409				2.68	1419.545	5.281040			
PREDICTION SYSTEM:									
PREDICTOR VARIABLE	MEAN	STANDARD DEVIATION	STANDARD ERROR	MEAN	MEAN SQU.	STD. DEVI.	STD. PARTIAL CORRELATION	INDEPENDENT CONTRIBUTION	
2.7 F0204	4.021160	1.684160	1.60103	*0.9065	*0.10361	*0.25433	*0.39734	.011678	
2.8 F0205	4.031921	1.638124	1.61503	*0.86395	*0.10365	*0.15145	*0.18956	.001430	
2.9 F0206	3.081211	1.735248	1.64203	*0.92053	*0.10467	*0.15467	*0.10737	.007556	
3.3 F0210	5.656330	1.242967	1.62455	*0.66660	*0.10351	*0.13139	*0.08492	.002124	
3.5 F0212	4.629426	1.955937	1.60225	*0.91000	*0.11113	*0.12245	*0.29025	.001223	
3.6 F0213	4.11805	1.075049	1.61395	*0.91501	*0.12961	*0.12961	*0.59270	.001227	
3.7 F0214	4.281149	1.891102	1.60120	*0.91702	*0.13768	*0.13768	*0.59940	.001312	
3.8 F0215	5.198103	1.094620	1.60120	*0.74542	*0.14724	*0.13958	*0.16429	.001434	
4.0 F0217	5.996879	1.362087	1.60120	*0.91950	*0.13057	*0.14119	*0.11749	.000779	
4.3 F0220	4.98070n	1.25767	1.60225	*0.92890	*0.13202	*0.14664	*0.11770	.000871	
4.4 F0221	4.024152	1.418230	1.61594	*0.91502	*0.13135	*0.13494	*0.11119	.000465	
4.5 F0222	3.551622	1.615430	1.61422	*0.91502	*0.12855	*0.11694	*0.25270	.000438	
4.6 F0223	2.450201	1.412975	1.612975	*0.76523	*0.12760	*0.12760	*0.24242	.000764	
4.8 F0225	4.12264	1.940793	1.60120	*0.92920	*0.11970	*0.11970	*0.11970	.000494	
4.9 F0226	4.890166	1.636434	1.60120	*0.93034	*0.12853	*0.11614	*0.16450	.000880	
5.0 F0227	4.272364	1.534334	1.60120	*0.92830	*0.12849	*0.11210	*0.16707	.000958	
5.1 F0228	4.768468	1.534334	1.60120	*0.88726	*0.11934	*0.11934	*0.19111	.000387	
5.2 F0229	4.008756	1.689727	1.60120	*0.91662	*0.14613	*0.11664	*0.11664	.001308	
5.5 F0232	4.076779	1.389888	1.61154	*0.91707	*0.13051	*0.11519	*0.09770	.001BC6	
5.6 F0233	5.002773	1.494392	1.60547	*0.91707	*0.13219	*0.11579	*0.11579	.000477	
5.7 F0234	5.168525	1.602253	1.60120	*0.92920	*0.13722	*0.12350	*0.12350	.001573	
6.6 F0243	4.007442	1.643730	1.613120	*0.93540	*0.12394	*0.11533	*0.19261	.000667	
6.7 F0244	4.267238	1.778136	1.613120	*0.93534	*0.12853	*0.11614	*0.19398	.000980	
7.5 F0252	5.718351	1.575977	1.613120	*0.91711	*0.12853	*0.11614	*0.19111	.000958	
7.7 F0254	5.0083700	1.715494	1.613120	*0.946140	*0.13434	*0.11615	*0.09853	.0013087	
7.9 F0256	5.207568	1.494935	1.60915	*0.91154	*0.12919	*0.11579	*0.11579	.00126	
9.0 F0404	4.981394	1.762939	1.604547	*0.914392	*0.13722	*0.12350	*0.12350	.000477	
9.5 F0405	4.288849	1.602253	1.60120	*0.93540	*0.13294	*0.11533	*0.19261	.000667	
9.6 F0410	5.001014	1.643730	1.613120	*0.93534	*0.12394	*0.11533	*0.19261	.000667	
9.9 F0413	5.071507	1.689555	1.613120	*0.91707	*0.12853	*0.11614	*0.19111	.000958	
1.00 F0414	4.993748	1.786777	1.613120	*0.91711	*0.12853	*0.11614	*0.19111	.000958	
1.02 F0415	5.006194	1.757774	1.6040450	*0.946140	*0.13434	*0.11615	*0.11615	.001215	
1.03 F0417	4.0036311	1.801450	1.6040450	*0.91154	*0.12919	*0.11579	*0.11579	.0013087	
1.04 F0418	4.953667	1.764883	1.6040450	*0.95956	*0.12828	*0.13051	*0.13051	.000847	
1.05 F0419	3.49524	1.778498	1.613120	*0.91707	*0.12887	*0.11694	*0.11694	.000205	
1.08 F0422	5.773075	1.557932	1.613120	*0.94570	*0.12853	*0.11614	*0.19261	.000667	
1.09 F0423	5.468461	1.60120	1.60120	*0.94570	*0.12853	*0.11614	*0.19261	.000667	
1.10 F0424	5.006202	1.633642	1.60120	*0.76155	*0.12853	*0.11614	*0.19261	.000667	
1.11 F0425	5.008887	1.600837	1.60120	*0.94607	*0.12853	*0.11614	*0.19261	.000667	
1.12 F0442	4.231647	1.6040450	1.60120	*0.94608	*0.12853	*0.11614	*0.19261	.000667	
1.29 F0443	5.068688	1.682147	1.60120	*0.94608	*0.12853	*0.11614	*0.19261	.000667	
1.57 F0731	5.003283	1.722267	1.6040450	*0.94504	*0.12784	*0.11615	*0.19261	.000667	
1.59 F0732	5.001224	1.644722	1.60120	*0.95008	*0.12775	*0.11615	*0.19261	.000667	
1.60 F0734	4.688887	1.715832	1.60120	*0.937331	*0.12823	*0.11615	*0.19261	.000667	
1.74 F0748	5.018971	1.362143	1.60120	*0.934675	*0.12797	*0.11615	*0.20277	.001098	
1.86 F0760	5.001459	1.38175	1.60120	*0.94867	*0.12730	*0.11615	*0.19261	.000695	

REGRESSION PROBLEM 12 ANALYSIS 48 DEPENDENT 221 FOBUT V833
 NUMBER OF PREDICTORS 36 FREE PREDICTIONS 24, 27, 33, 37, 41, 43, 45, 50, 53, 55, 61-62, 65, 67, 73, 77, 91, 95-97, 100-101, 105, 108, 116-117,
 120, 124, 129, 164, 173, 179-180, 197

PREDICTOR SYSTEM: VARIABLE	MEAN	STD ERR EST	EHN MEAN SIG.	REG CONST	-J-940169	REGRESSION	DF	SUM OF SQ.		F-RATIO	PROBABILITY
								STANDARD DEVIATION	WEIGHT	HEIGHT SIG.	CORRELATION
24 FU201	5.031226	1.508614	+0.4260	+0.02580	+0.01238	+0.01237	36	381278	*.00656		
27 FU204	4.02160	1.484160	-0.61475	+0.3471	+0.00777	+0.00450		361316	*.002426		
33 FU210	5.056330	1.472469	+0.79504	+0.53249	+0.01580	+0.01700		332242	*.002721		
37 FU214	4.281649	1.491072	-0.02346	+0.19469	+0.01195	+0.01195		477244	*.00284		
41 FU218	3.059613	1.481144	-0.04339	-0.11750	+0.01053	+0.01053		477466	*.00284		
42 FU219	2.963388	1.451228	-0.05023	-0.02750	+0.01034	+0.01034		47747	*.00284		
43 FU220	4.800700	1.455767	+0.52446	+0.38160	+0.01270	+0.01270		416150	*.002515		
45 FU222	3.551623	1.415430	+0.56665	+0.24799	+0.01137	+0.01137		322263	*.001371		
50 FU227	4.722364	1.434443	-0.03245	-0.02367	+0.00974	+0.00974		202671	*.002561		
53 FU230	5.267421	1.470724	+0.76552	+0.75985	+0.01410	+0.01410		601857	*.08746		
54 FU231	4.039766	1.464927	+0.27226	+0.18256	+0.01147	+0.01147		313553	*.001457		
55 FU232	4.076779	1.389466	+0.37013	+0.29278	+0.00949	+0.00949		345150	*.000474		
61 FU238	5.222615	1.294457	+2.95671	+2.38976	+0.11235	+0.11235		270407	*.001032		
62 FU239	4.194453	1.484674	-4.03333	-6.02675	+0.00733	+0.00733		356116	*.000884		
65 FU242	5.13272	1.470360	+0.63649	+0.49324	+0.12315	+0.12315		202703	*.000884		
67 FU244	4.787238	1.478036	+0.54912	+0.32685	+0.11899	+0.11899		286280	*.000884		
73 FU250	5.7474897	1.48997	+0.36252	-0.026475	+0.02717	+0.02717		520082	*.000884		
77 FU254	5.4839400	1.471543	+0.77426	+0.72780	+0.01179	+0.01179		495556	*.000884		
91 FU405	5.020914	1.491339	+0.45971	+0.42335	+0.01223	+0.01223		361559	*.000884		
95 FU409	4.18854	1.471968	+1.32567	+1.29676	+0.01061	+0.01061		301686	*.000884		
96 FU410	5.20904	1.471552	+0.71416	+0.62085	+0.01267	+0.01267		401350	*.000884		
97 FU411	5.010046	1.464236	+0.32649	-0.18053	+0.01217	+0.01217		400813	*.000884		
100 FU414	4.993794	1.478677	+0.29492	+0.20134	+0.01271	+0.01271		581990	*.000884		
104 FU415	4.662897	1.484913	+0.64914	+0.49807	+0.01174	+0.01174		400128	*.000884		
105 FU419	3.465524	1.475274	+0.31746	+0.18949	+0.00931	+0.00931		223652	*.000884		
108 FU422	5.2733075	1.455174	+0.45956	+0.42122	+0.01153	+0.01153		201663	*.000884		
114 FU432	4.986684	1.461760	+1.32549	+1.29676	+0.01061	+0.01061		450156	*.000884		
117 FU434	4.341087	1.471225	+0.31747	+0.18949	+0.01153	+0.01153		531922	*.000884		
120 FU439	5.040313	1.468472	+0.64914	+0.59591	+0.01217	+0.01217		639138	*.000884		
124 FU438	5.0406264	1.473574	+0.31747	+0.18949	+0.01153	+0.01153		400332	*.000884		
129 FU443	5.068581	1.464647	+0.31747	+0.18949	+0.01153	+0.01153		400332	*.000884		
164 FU738	4.03361	1.475274	+0.31747	+0.18949	+0.01153	+0.01153		400332	*.000884		
173 FU747	4.25171	1.461761	+0.45956	+0.42122	+0.01153	+0.01153		450156	*.000884		
179 FU753	4.07061	1.453743	+0.31747	+0.18949	+0.01153	+0.01153		531922	*.000884		
180 FU759	4.010582	1.478677	+0.29492	+0.20134	+0.01271	+0.01271		581990	*.000884		
197 FU771	4.039013	1.461761	+0.31747	+0.18949	+0.01153	+0.01153		400332	*.000884		